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OM protein - protein search, using sw model

Run on: June 8, 2001, 10:55:54 ; Search time 63.61 Seconds
(without alignments)
329.493 Million cell updates/sec

Title: US-09-397-548-14
Perfect score: 5748
Sequence: 1 MAAGCLLALTTLFQSLIG.....IIGIQFLLMLVSGSTRLL 1091

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 185757 seqs, 19210857 residues

Total number of hits satisfying chosen parameters: 185757

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents_AA: *
1: /cgn2.6/ptodata/2/1aa/5A_COMB.pep: *
2: /cgn2.6/ptodata/2/1aa/5B_COMB.pep: *
3: /cgn2.6/ptodata/2/1aa/6A_COMB.pep: *
4: /cgn2.6/ptodata/2/1aa/6B_COMB.pep: *
5: /cgn2.6/ptodata/2/1aa/PCTUS_COMB.pep: *
6: /cgn2.6/ptodata/2/1aa/backfiles1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	5748	100.0	1091	1 US-07-745-206A-25	Sequence 25, Appl
2	5748	100.0	1091	1 US-08-455-543A-52	Sequence 52, Appl
3	5748	100.0	1091	1 US-08-223-305C-52	Sequence 52, Appl
4	5748	100.0	1091	2 US-08-311-363-25	Sequence 25, Appl
5	5744	99.9	1091	3 US-08-713-118-4	Sequence 4, Appl
6	5744	99.9	1091	4 US-09-452-007-4	Sequence 4, Appl
7	5708.5	99.3	1086	1 US-08-455-543A-54	Sequence 54, Appl
8	5708.5	99.3	1086	2 US-08-223-305C-54	Sequence 54, Appl
9	5691.5	99.0	1084	1 US-08-455-543A-56	Sequence 56, Appl
10	5691.5	99.0	1084	2 US-08-223-305C-56	Sequence 56, Appl
11	5672	98.7	1103	1 US-08-455-543A-53	Sequence 53, Appl
12	5672	98.7	1103	2 US-08-223-305C-53	Sequence 53, Appl
13	5652	98.3	1079	1 US-08-455-543A-55	Sequence 55, Appl
14	5652	98.3	1079	2 US-08-223-305C-55	Sequence 55, Appl
15	5508.5	95.8	1106	1 US-08-435-675B-5	Sequence 5, Appl
16	5490.5	95.5	1106	1 US-08-336-257A-8	Sequence 8, Appl
17	5257.5	91.5	1086	6 5386025-8	Patent No. 5386025
18	2581.5	44.9	508	1 US-08-435-675B-6	Sequence 6, Appl
19	182	3.2	885	3 US-09-074-579-5	Sequence 5, Appl
20	159.5	2.8	946	3 US-09-074-579-3	Sequence 3, Appl
21	154	2.7	903	1 US-08-021-601-12	Sequence 12, Appl
22	154	2.7	903	1 US-08-082-849B-12	Sequence 12, Appl
23	154	2.7	903	5 PCT-US94-01624-12	Sequence 12, Appl
24	152.5	2.7	789	1 US-08-471-033-32	Sequence 32, Appl
25	152.5	2.7	789	2 US-08-471-044-32	Sequence 32, Appl
26	152.5	2.7	789	2 US-08-463-483A-32	Sequence 32, Appl
27	152.5	2.7	789	2 US-08-471-046A-32	Sequence 32, Appl

28	152.5	2.7	789	2 US-08-470-566B-32	Sequence 32, Appl
29	152.5	2.7	789	2 US-08-838-219B-4	Sequence 4, Appl
30	152.5	2.7	789	2 US-08-469-334-32	Sequence 32, Appl
31	152.5	2.7	789	3 US-09-300-529-32	Sequence 32, Appl
32	152.5	2.7	789	3 US-09-233-336A-4	Sequence 4, Appl
33	152.5	2.7	789	4 US-09-233-752A-4	Sequence 4, Appl
34	150.5	2.6	789	4 US-08-960-780-6	Sequence 6, Appl
35	148.5	2.6	790	4 US-08-960-780-4	Sequence 4, Appl
36	147.5	2.6	746	3 US-08-838-219B-6	Sequence 6, Appl
37	147.5	2.6	746	3 US-09-233-336A-6	Sequence 6, Appl
38	147.5	2.6	746	4 US-09-233-752A-6	Sequence 6, Appl
39	145.5	2.5	790	4 US-08-960-780-8	Sequence 8, Appl
40	141.5	2.5	789	1 US-08-471-033-29	Sequence 29, Appl
41	141.5	2.5	789	2 US-08-471-044-29	Sequence 29, Appl
42	141.5	2.5	789	2 US-08-463-483A-29	Sequence 29, Appl
43	141.5	2.5	789	2 US-08-471-046A-29	Sequence 29, Appl
44	141.5	2.5	789	2 US-08-470-566B-29	Sequence 29, Appl
45	141.5	2.5	789	2 US-08-838-219B-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-07-745-206A-25
; Sequence 25 Application US/07745206A
; Patent No. 5429921
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Feldman, Daniel
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Fitch, Even, Tabin & Flannery
; STREET: 135 S. LaSalle
; CITY: Chicago
; STATE: Illinois
; COUNTRY: U.S.A.
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07745,206A
; FILING DATE: 19910815
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Feder, Scott B
; REFERENCE/DOCKET NUMBER: 51504
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-372-7842
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-745-206A-25

Query Match 100.0%; Score 5748; DB 1; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1091; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MAAGCLLALTTLFQSLIGPSSEEPFPPSAVTIKSWDKMOEDLVTLAKTASGVNQLVDI 60
DB 1 MAAGCLLALTTLFQSLIGPSSEEPFPPSAVTIKSWDKMOEDLVTLAKTASGVNQLVDI 60

QY 61 YEKYQDLYTVEPNNAQOLVEITAARDIEKLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
DB 61 YEKYQDLYTVEPNNAQOLVEITAARDIEKLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EVVYNAKDDLDPEKNDSEPSQRIKPVIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
DB 121 EVVYNAKDDLDPEKNDSEPSQRIKPVIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTALDEVEFKKREDEPSLLQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
DB 181 NELNWTALDEVEFKKREDEPSLLQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
QY 241 RPWYIQAASPKDMLIIVDVSGVSGLTFLKIRTSVSEMLETLSDDDDFVNVASFSNAQD 300
DB 241 RPWYIQAASPKDMLIIVDVSGVSGLTFLKIRTSVSEMLETLSDDDDFVNVASFSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFGFAFEQLLNVSFRANCKIIML 360
DB 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFGFAFEQLLNVSFRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYNKDKKRVFRFSVQGHNYERGPIQWACENKGYIYEIPSIGAIR 420
DB 361 FTDGGEERAQEIFNKYNKDKKRVFRFSVQGHNYERGPIQWACENKGYIYEIPSIGAIR 420
QY 421 INTQBYLDVLRPMVLAGDKAKQVOWTNYLDLGLVITGTLVPFNITQGFENKTNLK 480
DB 421 INTQBYLDVLRPMVLAGDKAKQVOWTNYLDLGLVITGTLVPFNITQGFENKTNLK 480
QY 481 NOLILGVGVDSVLEDIRLPRFTLCPNGYFAIDPNGYVLLHPNLOPKNPKSOEPTVL 540
DB 481 NOLILGVGVDSVLEDIRLPRFTLCPNGYFAIDPNGYVLLHPNLOPKNPKSOEPTVL 540
QY 541 DFLDAELNDIKVEIRNKMIDGSEKFTRLVKSQDERYIDKGNRTYTTPVNGTDYSL 600
DB 541 DFLDAELNDIKVEIRNKMIDGSEKFTRLVKSQDERYIDKGNRTYTTPVNGTDYSL 600
QY 601 ALVLPYSFYIYKAKLETTIQARSKKGMKDSSETLKPDPNFEESGYTFIAPRDYCNLDKI 660
DB 601 ALVLPYSFYIYKAKLETTIQARSKKGMKDSSETLKPDPNFEESGYTFIAPRDYCNLDKI 660
QY 661 SDNTEFLNFEFTDRTPNPNNSCNADLINRVLLDAGFTNELVONYSKOKNIKGVKAR 720
DB 661 SDNTEFLNFEFTDRTPNPNNSCNADLINRVLLDAGFTNELVONYSKOKNIKGVKAR 720
QY 721 FVYTDGGITRVYKPEAGENWQENPETEYDSFYKRSILDNDNVYFTAPYFNKSGPGAYESSI 780
DB 721 FVYTDGGITRVYKPEAGENWQENPETEYDSFYKRSILDNDNVYFTAPYFNKSGPGAYESSI 780
QY 781 MVSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPKAGPVCDCCKRNSDVMDCVI 840
DB 781 MVSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPKAGPVCDCCKRNSDVMDCVI 840
QY 841 LDGCGFLMANHDDYTNOIGREFGEIDPSLMHLNYSIVYAFNKSVDYQSVCEPGAAPKQ 900
DB 841 LDGCGFLMANHDDYTNOIGREFGEIDPSLMHLNYSIVYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWTLQOFLSLFPRLLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAASWTLQOFLSLFPRLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTYFFNDKSKFSVGLDCGNCSEFRHGEKLMNTNLFIMVESKGTGTCPCDTRLLI 1020
DB 961 SCITEQTYFFNDKSKFSVGLDCGNCSEFRHGEKLMNTNLFIMVESKGTGTCPCDTRLLI 1020
QY 1021 QAEQTSQDGNPCDMVKQPRYKGPDPVCFDNNVLEDYTDGCGVSGNLPSLWYIIGIOFLLL 1080
DB 1021 QAEQTSQDGNPCDMVKQPRYKGPDPVCFDNNVLEDYTDGCGVSGNLPSLWYIIGIOFLLL 1080
QY 1081 WLVSQSTHRL 1091
DB 1081 WLVSQSTHRL 1091

RESULT 2
US-08-455-543A-52
; Sequence 52, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO 1: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-455-543A-52

Query Match 100.0%; Score 5748; DB 1; Length 1091;

Best Local Similarity 100.08; Pred. No. 0;			
Matches 1091; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY	1	MAAGCLLALTTLFOSLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
Db	1	MAAGCLLALTTLFOSLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
QY	61	YEKYQDLTYVEPNNAQRLVEIARAIDIEKLLSNRSKALVSLALEAEKVOAAHQWREDFASN	120
Db	61	YEKYQDLTYVEPNNAQRLVEIARAIDIEKLLSNRSKALVSLALEAEKVOAAHQWREDFASN	120
QY	121	EVVYNAKDDLPKNDSPGSRQIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL	180
Db	121	EVVYNAKDDLPKNDSPGSRQIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL	180
QY	181	NELNWTSDALDEYFKKRNEDPSLLMQVFGSATGLARYYPASPWVDSNRTPNKIDLYDVR	240
Db	181	NELNWTSDALDEYFKKRNEDPSLLMQVFGSATGLARYYPASPWVDSNRTPNKIDLYDVR	240
QY	241	RPWYIQGAASPKMDLILVDVSGVSGLTIKLRTSVSEMLETSLDDDDFVNVASFNSNAQD	300
Db	241	RPWYIQGAASPKMDLILVDVSGVSGLTIKLRTSVSEMLETSLDDDDFVNVASFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVLKDAVNNITAKGIDTYKGFSPAFQOLLNINVSRANCNKIIML	360
Db	301	VSCFQHLVQANVRNKKVLKDAVNNITAKGIDTYKGFSPAFQOLLNINVSRANCNKIIML	360
QY	361	FTDGGEEAQAEIFNKYNDKKVRFVRSVGOHNYERGPIONMACENKGYIYIPIGAI	420
Db	361	FTDGGEEAQAEIFNKYNDKKVRFVRSVGOHNYERGPIONMACENKGYIYIPIGAI	420
QY	421	INTQYLDVGRPMVLGAKAKOVQWNTVYLDALBLGVITGTLVPFNITGOFENKTNLK	480
Db	421	INTQYLDVGRPMVLGAKAKOVQWNTVYLDALBLGVITGTLVPFNITGOFENKTNLK	480
QY	481	NQLILGVMGVDSLEDIKRLTPRFLCPNGYYFAIDPNGYVLLHNLQPKPKSEPTVL	540
Db	481	NQLILGVMGVDSLEDIKRLTPRFLCPNGYYFAIDPNGYVLLHNLQPKPKSEPTVL	540
QY	541	DFLDAELENDIKVEIRNMKIDGESGEKFTLVKSQDERYIDKGNRTYTWTPVNGTDYSL	600
Db	541	DFLDAELENDIKVEIRNMKIDGESGEKFTLVKSQDERYIDKGNRTYTWTPVNGTDYSL	600
QY	601	ALVLTYSFYIYAKLEETITQARSKKMKDSETLKPDNFEESSYTFIAPRDYCNDLKI	660
Db	601	ALVLTYSFYIYAKLEETITQARSKKMKDSETLKPDNFEESSYTFIAPRDYCNDLKI	660
QY	661	SDNNTEFLNFEFTDRKTPNPNPCNADLINRVLDAGFTNELVQYNSKQNKIKGVAR	720
Db	661	SDNNTEFLNFEFTDRKTPNPNPCNADLINRVLDAGFTNELVQYNSKQNKIKGVAR	720
QY	721	FVYTDGGITRVYPKEAGENWQENPETEDSFYKRSILDNDNYVFTAPYFNKSGPGAYESGI	780
Db	721	FVYTDGGITRVYPKEAGENWQENPETEDSFYKRSILDNDNYVFTAPYFNKSGPGAYESGI	780
QY	781	MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPKAGVPCDCKRNSDVMDCVI	840
Db	781	MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPKAGVPCDCKRNSDVMDCVI	840
QY	841	LDDGGFLLMANHDDVTNOIGRFFGEIDPSLMRHLNIVSYAENKSYDYQSVCEPGAAPQ	900
Db	841	LDDGGFLLMANHDDVTNOIGRFFGEIDPSLMRHLNIVSYAENKSYDYQSVCEPGAAPQ	900
QY	901	GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLFPRLLEAVEMEDDDFTASLSKQ	960
Db	901	GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLFPRLLEAVEMEDDDFTASLSKQ	960
QY	961	SCITEQTQYFFNDKSKSGVLDCCNCSRFHGEKMTNLTIFINVESKGTGCPDTRLLI	1020
Db	961	SCITEQTQYFFNDKSKSGVLDCCNCSRFHGEKMTNLTIFINVESKGTGCPDTRLLI	1020
QY	1021	QAEQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDTDCGGVSGNLPSLWYIIGIQFLL	1080

Db	1021	QAEQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDTDCGGVSGNLPSLWYIIGIQFLL	1080
QY	1081	WLVSQSTHRL 1091	
Db	1081	WLVSQSTHRL 1091	
RESULT 3			
US-08-223-305C-52			
; Sequence 52, Application US/08223305C			
; Patent No. 5851824			
; GENERAL INFORMATION:			
; APPLICANT: Harpold, Michael			
; APPLICANT: Ellis, Steven			
; APPLICANT: Williams, Mark			
; APPLICANT: Feldman, Daniel			
; APPLICANT: McCue, Ann			
; APPLICANT: Brenner, Robert			
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND			
; TITLE OF INVENTION: METHODS			
; NUMBER OF SEQUENCES: 57			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Brown, Martin, Haller & McClain			
; STREET: 1660 Union Street			
; CITY: San Diego			
; STATE: California			
; COUNTRY: USA			
; ZIP: 92101-2926			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Diskette			
; COMPUTER: IBM Compatible			
; OPERATING SYSTEM: DOS			
; SOFTWARE: FastSEQ Version 1.5			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/223,305C			
; FILING DATE: April 4, 1994			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: 07/868,354			
; FILING DATE: April 10, 1992			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: US 07/745,206			
; FILING DATE: 15-AUG-1991			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: US 07/620,250			
; FILING DATE: 30-NOV-1990			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: US 07/482,384			
; FILING DATE: 20-FEB-1990			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: US 07/603,751			
; FILING DATE: 04-APR-1989			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: WO PCT/US89/01408			
; FILING DATE: 04-APR-1989			
; PRIOR APPLICATION DATA:			
; APPLICATION NUMBER: PS 07/176,899			
; FILING DATE: 04-APR-1988			
; ATTORNEY/AGENT INFORMATION:			
; NAME: Seidman, Stephanie L.			
; REGISTRATION NUMBER: 33,779			
; REFERENCE/DOCKET NUMBER: 52516 (P519739)			
; TELEPHONE: (619)238-0999			
; TELEFAX: (619)238-0062			
; INFORMATION FOR SEQ ID NO: 52:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 1091 amino acids			
; TYPE: amino acid			
; STRANDEDNESS: single			
; TOPOLOGY: linear			
; MOLECULE TYPE: protein			
; FRAGMENT TYPE: internal			
US-08-223-305C-52			

Query Match 100.0%; Score 5748; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1091; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLTFLQSLLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60
DB 1 MAAGCLLALTTLTFLQSLLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60

QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHOHREDFASN 120
DB 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHOHREDFASN 120

QY 121 EVVYVNAKDDLDPEKNDSEPGSQRIKPVIEDANFGROIYQHAHVHIPTDIYEGSTIVL 180
DB 121 EVVYVNAKDDLDPEKNDSEPGSQRIKPVIEDANFGROIYQHAHVHIPTDIYEGSTIVL 180

QY 181 NELNWTSALEDEVFKKREEDPSLLMQVFGSATGLARYYPASVPWDSNRPKNIDLYDVR 240
DB 181 NELNWTSALEDEVFKKREEDPSLLMQVFGSATGLARYYPASVPWDSNRPKNIDLYDVR 240

QY 241 RPYWIGAAASPKDMLILVDVSGVSLTLKLI RTSVSEMLETSLDSDDFVNVASFNSNAOD 300
DB 241 RPYWIGAAASPKDMLILVDVSGVSLTLKLI RTSVSEMLETSLDSDDFVNVASFNSNAOD 300

QY 301 VSCFQHLVQANVRNKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINVSFRANCKIIML 360
DB 301 VSCFQHLVQANVRNKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINVSFRANCKIIML 360

QY 361 FTDGGERAQEILFNKYNKDKYRVERFSGOHNRYERGPQIOWMACENKGYIYIPISGAIR 420
DB 361 FTDGGERAQEILFNKYNKDKYRVERFSGOHNRYERGPQIOWMACENKGYIYIPISGAIR 420

QY 421 INTQEYLDVLRPMVLGDKAQVQWNTVYLDLELGLVITGTLVFNITGTFENKTNLK 480
DB 421 INTQEYLDVLRPMVLGDKAQVQWNTVYLDLELGLVITGTLVFNITGTFENKTNLK 480

QY 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYYFAIDPNGYVLLHNPLOPKPKSQEPVTL 540
DB 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYYFAIDPNGYVLLHNPLOPKPKSQEPVTL 540

QY 541 DFLDAELENDAKVEIRNMKIDGSEKFTRLVKSDERYIDKGNRTYTWTPVNGTDSL 600
DB 541 DFLDAELENDAKVEIRNMKIDGSEKFTRLVKSDERYIDKGNRTYTWTPVNGTDSL 600

QY 601 ALVLPYTSFYIKAKLEETITQARSKKGMKDSITLKPDPNFEESYTFIAPRDYCNDLKI 660
DB 601 ALVLPYTSFYIKAKLEETITQARSKKGMKDSITLKPDPNFEESYTFIAPRDYCNDLKI 660

QY 661 SDNTEFLNFEFIDRKTTPNPNADLNKRVLLDAGFTNELVQYNSKQKNIKGVKAR 720
DB 661 SDNTEFLNFEFIDRKTTPNPNADLNKRVLLDAGFTNELVQYNSKQKNIKGVKAR 720

QY 721 FVYTDGGITRVYPKEAGENQWNPETYEDSFYKRSILDNDNVYFTAPYKNSGPGAYESGI 780
DB 721 FVYTDGGITRVYPKEAGENQWNPETYEDSFYKRSILDNDNVYFTAPYKNSGPGAYESGI 780

QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGVPCCKRNSDVMDCVI 840
DB 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGVPCCKRNSDVMDCVI 840

QY 841 LDGQFLMANHDDYTNQIGRFFGIDPSLMHLVNI SVYAFNKSIDYQSVCEPGAAPKQ 900
DB 841 LDGQFLMANHDDYTNQIGRFFGIDPSLMHLVNI SVYAFNKSIDYQSVCEPGAAPKQ 900

QY 901 GAGHSAYVPSVADILQIGWATAAWSILQOFLTSLTFPRLLEAVEMDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAWSILQOFLTSLTFPRLLEAVEMDDFTASLSKQ 960

QY 961 SCITEOTQYFFDNDKSKPSGVLDGNCNCRIFHGEKLMNTNLI FIVNESKGTCPCDTRLII 1020
DB 961 SCITEOTQYFFDNDKSKPSGVLDGNCNCRIFHGEKLMNTNLI FIVNESKGTCPCDTRLII 1020

QY 1021 QAEQTSDEGNPCDMYKQPRYKRGPDVCFDNNVLEDTDCGGVSGNLNPSLWYIIGIOFLLL 1080
DB 1021 QAEQTSDEGNPCDMYKQPRYKRGPDVCFDNNVLEDTDCGGVSGNLNPSLWYIIGIOFLLL 1080

QY 1081 WLVSNGTHRL 1091
DB 1081 WLVSNGTHRL 1091

RESULT 4
US-08-311-363-25
; Sequence 25, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311.363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/07/45.206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-311-363-25

Query Match 100.0%; Score 5748; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1091; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLTFLQSLLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60
DB 1 MAAGCLLALTTLTFLQSLLLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60

QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHOHREDFASN 120
DB 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHOHREDFASN 120

QY 121 EVVYVNAKDDLDPEKNDSEPGSQRIKPVIEDANFGROIYQHAHVHIPTDIYEGSTIVL 180
DB 121 EVVYVNAKDDLDPEKNDSEPGSQRIKPVIEDANFGROIYQHAHVHIPTDIYEGSTIVL 180

QY 181 NELNWTSALEVEFKKREEDPSLLWQVFGSATGLARYYPASPDWNSRTPNKLIDLYDVR 240
DB 181 NELNWTSALEVEFKKREEDPSLLWQVFGSATGLARYYPASPDWNSRTPNKLIDLYDVR 240
QY 241 RPWYQGAASPKDMLILVDVSGVSGTLKLTIRTSVSEMLETSDDDDFNVASFNSNAQD 300
DB 241 RPWYQGAASPKDMLILVDVSGVSGTLKLTIRTSVSEMLETSDDDDFNVASFNSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINYSRANCNKIIML 360
DB 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYNDKKVRFVRSVGOHNYERGPQIOWMACENKGYIYEIPSGAIR 420
DB 361 FTDGGEERAQEIFNKYNDKKVRFVRSVGOHNYERGPQIOWMACENKGYIYEIPSGAIR 420
QY 421 INTQEVLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLPVFNITGTFENKTNLK 480
DB 421 INTQEVLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLPVFNITGTFENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTFRFTLPCPNGYFAIDPNQYVLLHNPQLPKPKSQEPVTL 540
DB 481 NOLILGVMGVDVSLIEDIKRLTFRFTLPCPNGYFAIDPNQYVLLHNPQLPKPKSQEPVTL 540
QY 541 DFLDAELNDIKVIRNKMIDSESEKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
DB 541 DFLDAELNDIKVIRNKMIDSESEKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYTFYIIKALEETITQARSKGKMKDSETLKPDNFEESGTYFTAPRDYCNCLKI 660
DB 601 ALVLPYTFYIIKALEETITQARSKGKMKDSETLKPDNFEESGTYFTAPRDYCNCLKI 660
QY 661 SDNTEFLNNEFIDRKTTPNPNCSNADLINRVLLDAGFTNELVQVNSKQKNIKGVKAR 720
DB 661 SDNTEFLNNEFIDRKTTPNPNCSNADLINRVLLDAGFTNELVQVNSKQKNIKGVKAR 720
QY 721 FVYDGGITRVYPKEAGNQNPEYEDSFYKRSLDNDNYYVFTAPYFNKSGPGAYESGI 780
DB 721 FVYDGGITRVYPKEAGNQNPEYEDSFYKRSLDNDNYYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKSIDPCAGPVCDCKRNSDNDYCVI 840
DB 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKSIDPCAGPVCDCKRNSDNDYCVI 840
QY 841 LDDGGFLLMANHDDVTNIGRFFGEIDPSLMRHLVNI SYAFNKSVDYQSVCEPGAAPKQ 900
DB 841 LDDGGFLLMANHDDVTNIGRFFGEIDPSLMRHLVNI SYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAWSILOQFLLSLFPRLLEAVEMDDDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAWSILOQFLLSLFPRLLEAVEMDDDDFTASLSKQ 960
QY 961 SCITEQYFFNDKSFSGVLDGNCNCRIFHGEKLMNTNLI FIMVESKGTCPDTRLLI 1020
DB 961 SCITEQYFFNDKSFSGVLDGNCNCRIFHGEKLMNTNLI FIMVESKGTCPDTRLLI 1020
QY 1021 QAEQTSQDGNPCDMYKQPRYKGPVDFCDNNVLEDYTDGGSGLNPSLWYIIGIQFLL 1080
DB 1021 QAEQTSQDGNPCDMYKQPRYKGPVDFCDNNVLEDYTDGGSGLNPSLWYIIGIQFLL 1080
QY 1081 WLVSGSTHRL 1091
DB 1081 WLVSGSTHRL 1091

RESULT 5

US-08-713-118-4

; Sequence 4, Application US/08713118
; Patent No. 6040436
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru

; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US798/713,118
; FILING DATE: 16-SEP-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-713-118-4

Query Match 99.9%; Score 5744; DB 3; Length 1091;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1090; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLFOSLLIGSPSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60
DB 1 MAAGCLLALTTLFOSLLIGSPSEPPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60
QY 61 YEKYQDLTYVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHWRDFASN 120
DB 61 YEKYQDLTYVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHWRDFASN 120
QY 121 EVVYVNAKDDLDPEKNDSEPGSORIKPVIEDANFGROIYQHAAVHIPTDIYEGSTIVL 180
DB 121 EVVYVNAKDDLDPEKNDSEPGSORIKPVIEDANFGROIYQHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSALEVEFKKREEDPSLLWQVFGSATGLARYYPASPDWNSRTPNKLIDLYDVR 240
DB 181 NELNWTSALEVEFKKREEDPSLLWQVFGSATGLARYYPASPDWNSRTPNKLIDLYDVR 240
QY 241 RPWYQGAASPKDMLILVDVSGVSGTLKLTIRTSVSEMLETSDDDDFNVASFNSNAQD 300
DB 241 RPWYQGAASPKDMLILVDVSGVSGTLKLTIRTSVSEMLETSDDDDFNVASFNSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINYSRANCNKIIML 360
DB 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNINYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYNDKKVRFVRSVGOHNYERGPQIOWMACENKGYIYEIPSGAIR 420
DB 361 FTDGGEERAQEIFNKYNDKKVRFVRSVGOHNYERGPQIOWMACENKGYIYEIPSGAIR 420
QY 421 INTQEVLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLPVFNITGTFENKTNLK 480
DB 421 INTQEVLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLPVFNITGTFENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTFRFTLPCPNGYFAIDPNQYVLLHNPQLPKPKSQEPVTL 540

Db 481 NQILGVMGVDSLEDIKRLTFRFTLCPNGYFAIDPNGYALLHPLNLPKQSPFVTL 540
QY 541 DFLDAELENIDKVEIRKMKIDGSEKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENIDKVEIRKMKIDGSEKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYFYIYKAKLEETITQARSKKGMKDSKSETLKPDPNFEEGTYFTIAPRDYCNLKI 660
Db 601 ALVLPYFYIYKAKLEETITQARSKKGMKDSKSETLKPDPNFEEGTYFTIAPRDYCNLKI 660
QY 661 SDNTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELVQYNSKQKNIGVKAR 720
Db 661 SDNTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELVQYNSKQKNIGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPCAGPVCDCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPCAGPVCDCKRNSDVMDCVI 840
QY 841 LDGGLLHANHDDYTNQIRFGCEIDPSLMRHLVNSIYAFNKSVDYOSVCEPGAAPKQ 900
Db 841 LDGGLLHANHDDYTNQIRFGCEIDPSLMRHLVNSIYAFNKSVDYOSVCEPGAAPKQ 900
QY 901 GAGRSAYVPSVADILOIGWATAAAMSILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGRSAYVPSVADILOIGWATAAAMSILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTQVFFDNDKSFSGVLDGCGNCRIFHGEKLMNTNLIFIMVESKGTCPDTRLLI 1020
Db 961 SCITEQTQVFFDNDKSFSGVLDGCGNCRIFHGEKLMNTNLIFIMVESKGTCPDTRLLI 1020
QY 1021 QARQTSQGNPCDMVQPRYKGPVCFDNNVLEDYDCGGVSGLNPLWYIIGIQFLL 1080
Db 1021 QARQTSQGNPCDMVQPRYKGPVCFDNNVLEDYDCGGVSGLNPLWYIIGIQFLL 1080
QY 1081 WLVSQSTHRL 1091
Db 1081 WLVSQSTHRL 1091

RESULT 6

US-09-452-007-4
; Sequence 4, Application US/09452007
; Patent No. 6140485

GENERAL INFORMATION:

; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington

; STATE: MA

; COUNTRY: USA

; ZIP: 02173-4799

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/08/713,118

1026)
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-452-007-4

Query Match 99.9%; Score 5744; DB 4; Length 1091;

Best Local Similarity 99.9%; Pred. No. 0;

Matches 1090; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MAAGCULLALTTLFOSLLIGPSSEEPFSAVTIKSWDKMQEDLVTLAKTASGVNOLVDI 60
Db 1 MAAGCULLALTTLFOSLLIGPSSEEPFSAVTIKSWDKMQEDLVTLAKTASGVNOLVDI 60
QY 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EYVYNKADLDPEKNDSPEGSQRIKPVIEDANFGQRIYQYHAAVHIPTDIYEGSTIVL 180
Db 121 EYVYNKADLDPEKNDSPEGSQRIKPVIEDANFGQRIYQYHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSAIDVEYFKKRNREDPSLQVFGSATGLARYYPASPWVDSNRTPNKIDLDVDR 240
Db 181 NELNWTSAIDVEYFKKRNREDPSLQVFGSATGLARYYPASPWVDSNRTPNKIDLDVDR 240
QY 241 RPWYIQGAASPKDMLILVDVSGVSGLTCLKIRTSYSEMLETLSDDDFNVASFNSNAOD 300
Db 241 RPWYIQGAASPKDMLILVDVSGVSGLTCLKIRTSYSEMLETLSDDDFNVASFNSNAOD 300
QY 301 VSCFQHLVQANVRNKKVLDVANNITAKITDYKKGFSAFQOLLNYSRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDVANNITAKITDYKKGFSAFQOLLNYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYKDKVRFVSQGHYERGPQIOWMACENKGYIYEIPSGAIGR 420
Db 361 FTDGGEERAQEIFNKYKDKVRFVSQGHYERGPQIOWMACENKGYIYEIPSGAIGR 420
QY 421 INTQEYLDVLRPMVLGADKAKQVQWNTNYLDALGLVITGTLPVFNITGOFENKTNLK 480
Db 421 INTQEYLDVLRPMVLGADKAKQVQWNTNYLDALGLVITGTLPVFNITGOFENKTNLK 480
QY 481 NQLILGVMGVDVSLIEDIKELTFRFTLCPNGYFAIDPNGYALLHPLNLPKQSPFVTL 540
Db 481 NQLILGVMGVDVSLIEDIKELTFRFTLCPNGYFAIDPNGYALLHPLNLPKQSPFVTL 540
QY 541 DFLDAELENIDKVEIRKMKIDGSEKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENIDKVEIRKMKIDGSEKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYFYIYKAKLEETITQARSKKGMKDSKSETLKPDPNFEEGTYFTIAPRDYCNLKI 660
Db 601 ALVLPYFYIYKAKLEETITQARSKKGMKDSKSETLKPDPNFEEGTYFTIAPRDYCNLKI 660
QY 661 SDNTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELVQYNSKQKNIGVKAR 720
Db 661 SDNTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELVQYNSKQKNIGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780

QY 781 MVSKEVYIIOGKLLKPAVVGKIDVNSWIENTFTKSIDPCAGPVCDCKRNSDVNDVCI 840
DB 781 MVSKEVYIIOGKLLKPAVVGKIDVNSWIENTFTKSIDPCAGPVCDCKRNSDVNDVCI 840
QY 841 LDGSGFLMANHDDYNOIGRFGEDPSLMRHLVNSVYAFNKSVDYOSVCEPAGAPKQ 900
DB 841 LDGSGFLMANHDDYNOIGRFGEDPSLMRHLVNSVYAFNKSVDYOSVCEPAGAPKQ 900
QY 901 GAGHSAYVPSADILQIGWATAAAMSILQOFLSLTFRLEAVEVEMEDDDFTASLSKQ 960
DB 901 GAGHSAYVPSADILQIGWATAAAMSILQOFLSLTFRLEAVEVEMEDDDFTASLSKQ 960
QY 961 SCITEOTQVFFDNDSSFSGLDGCNCSRIHFGEKLMNTNLFIMVESKGTCPDTRLLI 1020
DB 961 SCITEOTQVFFDNDSSFSGLDGCNCSRIHFGEKLMNTNLFIMVESKGTCPDTRLLI 1020
QY 1021 QABQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDYDCGGVSGNLPSLWYIIGIOFLLL 1080
DB 1021 QABQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDYDCGGVSGNLPSLWYIIGIOFLLL 1080
QY 1081 WLVSGSTHRL 1091
DB 1081 WLVSGSTHRL 1091

RESULT 7
US-08-455-543A-54
; Sequence 54, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1086 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: Internal
; US-08-455-543A-54

Query Match 99.3%; Score 5708.5; DB 1; Length 1086;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 1086; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

QY 1 MAAGCLLALTLLTFLQSLLLGPSSEEPFSAVTIKSWDKMOEDLVTLAKTASGVNQLVDI 60
DB 1 MAAGCLLALTLLTFLQSLLLGPSSEEPFSAVTIKSWDKMOEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHWRDFASN 120
DB 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHWRDFASN 120
QY 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGRQISYQHAHVHPTDIYEGSTIVL 180
DB 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGRQISYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNWTLSALDEVFKKKNREDDPSLLWQVFGSATGLARYYPASPMVDNSRPNKIDLDVDRR 240
DB 181 NELNWTLSALDEVFKKKNREDDPSLLWQVFGSATGLARYYPASPMVDNSRPNKIDLDVDRR 240
QY 241 RPWYIQAASPKDMLILVDVSGVSGLTLLKLIITSYSEMLETLSDDDDFVNVSFNSNAQD 300
DB 241 RPWYIQAASPKDMLILVDVSGVSGLTLLKLIITSYSEMLETLSDDDDFVNVSFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKDAVNNITAKGITDYKKGFSFAFEQLLNNVSRANCNKIIML 360
DB 301 VSCFQHLVQANVRNKKVLKDAVNNITAKGITDYKKGFSFAFEQLLNNVSRANCNKIIML 360
QY 361 FTDGGERAQEILFNKYNKDKKVRFRFESVGOHNYERGPIQWACENKGYIYEIPSGAIR 420
DB 361 FTDGGERAQEILFNKYNKDKKVRFRFESVGOHNYERGPIQWACENKGYIYEIPSGAIR 420
QY 421 INTQEYLDVLRPMVLGADKAKQVQNTNYLDALGLVITGTLPVFNITGQFENKTNLK 480
DB 421 INTQEYLDVLRPMVLGADKAKQVQNTNYLDALGLVITGTLPVFNITGQFENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTPRFTLCPNGYVFAIDPNGYVLLHPLNLPKNKSPQBPVTL 540
DB 481 NOLILGVMGVDVSLIEDIKRLTPRFTLCPNGYVFAIDPNGYVLLHPLNLPKNKSPQBPVTL 540
QY 541 DFLDAELENDEIKVEIRNKMIDGESGKERTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
DB 541 DFLDAELENDEIKVEIRNKMIDGESGKERTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYTFYIYKAKLEETITQARSKKGMKDSSETLKPONFESGYTFFIAPRDYCNLDKI 660
DB 601 ALVLPYTFYIYKAKLEETITQARSKKGMKDSSETLKPONFESGYTFFIAPRDYCNLDKI 660
QY 661 SDNTEFLNFEFIDRKTNNPNSCNADLNRLVLLDAGFTNELVQVNSKQNKIKVKKAR 720
DB 661 SDNTEFLNFEFIDRKTNNPNSCNADLNRLVLLDAGFTNELVQVNSKQNKIKVKKAR 720

Db 656 SDNTEFLNFNEFDTRKTPNPNPCNADLNRLVLLDAGFTNELVQVNSKQKNIKGVKAR 715
QY 721 FVVDGGITRVYPKEAGENQENPETIYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 716 FVVDGGITRVYPKEAGENQENPETIYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 775
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSHWFNFTKTSIRDPGAGVPCDCKRNSDYMDCVI 840
Db 776 MYSKAVEIYIOGKLLKPAVVGKIDVNSHWFNFTKTSIRDPGAGVPCDCKRNSDYMDCVI 835
QY 841 LDDGGFLMANHDDYTNOIGRFFGEIDPSLMRHLNYSVYAFNKSYDYQSVCEPGAAPKQ 900
Db 836 LDDGGFLMANHDDYTNOIGRFFGEIDPSLMRHLNYSVYAFNKSYDYQSVCEPGAAPKQ 895
QY 901 GAGHSAYVPSVADILQIGWATAAASLQOFLSLFPRLEAVEEMDDDDFTASLSKQ 960
Db 896 GAGHSAYVPSVADILQIGWATAAASLQOFLSLFPRLEAVEEMDDDDFTASLSKQ 955
QY 961 SCITOTQYFFNDKSFSGVLDCCGNCSPHFHGEKLMNTLFINVESKGTCPDTRLLI 1020
Db 956 SCITOTQYFFNDKSFSGVLDCCGNCSPHFHGEKLMNTLFINVESKGTCPDTRLLI 1015
QY 1021 QAEQTSDEGNPCDMYKQPRYKGPVDCFDNNVLEDYTDGCGVSGLNPSLWYIIGIQFLLL 1080
Db 1016 QAEQTSDEGNPCDMYKQPRYKGPVDCFDNNVLEDYTDGCGVSGLNPSLWYIIGIQFLLL 1075
QY 1081 WLVSSTHRL 1091
Db 1076 WLVSSTHRL 1086

RESULT 8

US-08-223-305C-54
; Sequence 54, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESS: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1086 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-223-305C-54

Query Match 99.3%; Score 5708.5; DB 2; Length 1086;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 1086; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

Qy 1 MAAGCLLALTTLFQSLILIGPSSEPPFSAVTIKSWDKMQEDVTLAKTAGSVNQLVDI 60
Db 1 MAAGCLLALTTLFQSLILIGPSSEPPFSAVTIKSWDKMQEDVTLAKTAGSVNQLVDI 60
Qy 61 YEKYQDLYTVEPNARQVETAAARDIEKLLSNRSKALVSLAEAEKVQAAHQRDFASN 120
Db 61 YEKYQDLYTVEPNARQVETAAARDIEKLLSNRSKALVSLAEAEKVQAAHQRDFASN 120
Qy 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROIYSYQAAVHIPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROIYSYQAAVHIPTDIYEGSTIVL 180
Qy 181 NELNWTSDALDEVFKKREEDPSLLWQVFGSATGLARYYPASPWDNSRTPKNKIDLYDVR 240
Db 181 NELNWTSDALDEVFKKREEDPSLLWQVFGSATGLARYYPASPWDNSRTPKNKIDLYDVR 240
Qy 241 RPWYIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSEMLETSDDDDFVNVASFNSAQD 300
Db 241 RPWYIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSEMLETSDDDDFVNVASFNSAQD 300
Qy 301 VSCFOHLVQAVNRNKKVLLKDAVNNTAKGIDYKKGFSFAFEQLLNVSRANCNKIIML 360
Db 301 VSCFOHLVQAVNRNKKVLLKDAVNNTAKGIDYKKGFSFAFEQLLNVSRANCNKIIML 360
Qy 361 FTDGGEERAQEIFNKYNKDKKVRVFRFVSGQHNYERGIQWACENKGYEIPSGAIR 420
Db 361 FTDGGEERAQEIFNKYNKDKKVRVFRFVSGQHNYERGIQWACENKGYEIPSGAIR 420
Qy 421 INTOEYLDVLGRPMVLGDKAKOVQWNTVYLDALGLVITGLTPVFNITGQFENKTLK 480
Db 421 INTOEYLDVLGRPMVLGDKAKOVQWNTVYLDALGLVITGLTPVFNITGQFENKTLK 480
Qy 481 NQLILGVMGVDVSLDIKRLFPRTLCFNGYFFAIDPNGYVLLHPNLQPKSQEPYTL 540
Db 481 NQLILGVMGVDVSLDIKRLFPRTLCFNGYFFAIDPNGYVLLHPNLQPKSQEPYTL 535
Qy 541 DFLDAELENDIKVEIRNKMIDGESGKTFRLVKSQDRIYDKGNRTYTWTPVNGTDYSL 600
Db 536 DFLDAELENDIKVEIRNKMIDGESGKTFRLVKSQDRIYDKGNRTYTWTPVNGTDYSL 595
Qy 601 ALVLPYSFYIYKAKLEETITQAKSKGKMDSEPLKPDNFEESGYTFIAPRDCNDLKI 660
Db 596 ALVLPYSFYIYKAKLEETITQAKSKGKMDSEPLKPDNFEESGYTFIAPRDCNDLKI 655

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QY 661 SDNTEFLNFEIDRKTNPNSCNADLINRVLLDAGFTNVLQVWWSKQNIKGVKAR 720
D 656 SDNTEFLNFEIDRKTNPNSCNADLINRVLLDAGFTNVLQVWWSKQNIKGVKAR 715
QY 721 FVYTDGGITRVYKPEAGENWOENPEYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
D 716 FVYTDGGITRVYKPEAGENWOENPEYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 775
QY 781 MVSXAVIYIQQKLLPAAVYGIKIDVNSWIENFTKTSIRDPCAGPVCDCRNSDVMDCVI 840
D 776 MVSXAVIYIQQKLLPAAVYGIKIDVNSWIENFTKTSIRDPCAGPVCDCRNSDVMDCVI 835
QY 841 LDGCGFLMANHDDYTNQIGRFGGEIDPSPMLRHLVNIYSYAFNKSVDYQSVCEPGAAPKQ 900
D 836 LDGCGFLMANHDDYTNQIGRFGGEIDPSPMLRHLVNIYSYAFNKSVDYQSVCEPGAAPKQ 895
QY 901 GAGHRSAYVPSVADILQIGHWATAAWSIILQOFLLSLTFPRLLEAVEMEDDDFTASLSKQ 960
D 896 GAGHRSAYVPSVADILQIGHWATAAWSIILQOFLLSLTFPRLLEAVEMEDDDFTASLSKQ 955
QY 961 SCITEQYQYFFDNDKSFSGVLDCGNGSRIFHGEKLMNTNLIFIMVESKGTCPCDTRLII 1020
D 956 SCITEQYQYFFDNDKSFSGVLDCGNGSRIFHGEKLMNTNLIFIMVESKGTCPCDTRLII 1015
QY 1021 QAEQTSQPNPCDMVKQPRYRKGPDVCFDNNVLEDYDCGVSGLNPSLWIYIGIQFLLL 1080
D 1016 QAEQTSQPNPCDMVKQPRYRKGPDVCFDNNVLEDYDCGVSGLNPSLWIYIGIQFLLL 1075
QY 1081 WLVSQSTHRL 1091
D 1076 WLVSQSTHRL 1086

RESULT 9
US-08-455-543A-56
; Sequence 56, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/869,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
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; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1084 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-455-543A-56
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Query Match 99.0%; Score 5691.5; DB 1; Length 1084;

Best Local Similarity 99.3%; Pred. No. 0;

Matches 1083; Conservative 0; Mismatches 1; Indels 7; Gaps 1;

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QY 1 MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWYDKMQEDLVTLAKTASGYNQLVDI 60
D 1 MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWYDKMQEDLVTLAKTASGYNQLVDI 60
QY 61 YEKYQDLYTVEPNAROLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQRDEFSN 120
D 61 YEKYQDLYTVEPNAROLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQRDEFSN 120
QY 121 EVVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGRIQISYQHAHVHPTDIYSGTIVL 180
D 121 EVVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGRIQISYQHAHVHPTDIYSGTIVL 180
QY 181 NELNWTALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPPWVDNSRTNPKIDLYDVR 240
D 181 NELNWTALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPPWVDNSRTNPKIDLYDVR 240
QY 241 RPWYIOGAASPDKMLILVDYSGVSGTLAKLIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
D 241 RPWYIOGAASPDKMLILVDYSGVSGTLAKLIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFEQQLLNYSRANCKIIML 360
D 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFEQQLLNYSRANCKIIML 360
QY 361 FTDGGEERAQEIENKYNKDKKVRVFRFSGOHNHYERGIOMACENKGYEYFISGAIR 420
D 361 FTDGGEERAQEIENKYNKDKKVRVFRFSGOHNHYERGIOMACENKGYEYFISGAIR 420
QY 421 INTQEYLDVLGRPMVLGADKAKQVQWNTNVDLDALELGVITGLPVENITGOFFENKLNK 480
D 421 INTQEYLDVLGRPMVLGADKAKQVQWNTNVDLDALELGVITGLPVENITGOFFENKLNK 480
QY 481 NQLITLGVMGYDVSLEDIKRLTPRETLCNPGYFAIDPNGYVLLHPNLPKNPKSQEPVTL 540
D 481 NQLITLGVMGYDVSLEDIKRLTPRETLCNPGYFAIDPNGYVLLHPNLPKNPKSQEPVTL 540
QY 541 DFLDAELENDIKVEIRNKNMIDGESGEKTFRTLVKYSQDERYIDKGNRTYTTWTPVNGTDYSL 600
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Db 541 DFLAELENDIKVEIRNKMIDGSEKTFITLVKSQDERYIDKGNRTYTPVNGTDYSL 600
QY 601 ALVLTPTSYFYIKALEETITQARSKKGMKQSETLKPDPNFEEGTYFTIAPRYCNDLKI 660
Db 601 ALVLTPTSYFYIKALEETITQARY-----SETLKPDPNFEEGTYFTIAPRYCNDLKI 653
QY 661 SDNTEFLNFEIDRKTNNPNSCNADLNRLVLLDAGFTNELVQNSQKNIKGVYKAR 720
Db 654 SDNTEFLNFEIDRKTNNPNSCNADLNRLVLLDAGFTNELVQNSQKNIKGVYKAR 713
QY 721 FVYTDGGITRVYKPEAGENQENPETEYDSFYKRSLDNDNYVETAPYFNKSGPGAYESGI 780
Db 714 FVYTDGGITRVYKPEAGENQENPETEYDSFYKRSLDNDNYVETAPYFNKSGPGAYESGI 773
QY 781 MVS KAVEIYIQQKLLPAVVGIIKIDVNSWIENTKTSIRPCAGPVCDCRNSDVMDCVI 840
Db 774 MVS KAVEIYIQQKLLPAVVGIIKIDVNSWIENTKTSIRPCAGPVCDCRNSDVMDCVI 833
QY 841 LDGGFLLMANHDDYTNQIGRFTGEIDPDLMLRHLNLSVYAFNKSVDYQVCPGPAKPQ 900
Db 834 LDGGFLLMANHDDYTNQIGRFTGEIDPDLMLRHLNLSVYAFNKSVDYQVCPGPAKPQ 893
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Db 1074 WLVSGSTHRL 1084

RESULT 10
US-08-223-305C-56
; Sequence 56, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seldman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0599
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
LENGTH: 1084 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: Internal
US-08-223-305C-56

Query Match 99.0%; Score 5691.5; DB 2; Length 1084;
Best Local Similarity 99.3%; Pred. No. 0;
Matches 1083; Conservative 0; Mismatches 1; Indels 7; Gaps 1;

QY 1 MAAGCLLALTTLTFLQSLLIGPSSEEPFPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTTLTFLQSLLIGPSSEEPFPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQRLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLYTVEPNNAQRLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EVVYNAKDDLDPEKNDSEPGSORIKPVFTEDANFGRIQISYQHAHVHIPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPGSORIKPVFTEDANFGRIQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNMTSALDEVEFKKNEEDPSSLQWVFGSATGLARYYPASPPWVDSNRTNPKIDLYDVR 240
Db 181 NELNMTSALDEVEFKKNEEDPSSLQWVFGSATGLARYYPASPPWVDSNRTNPKIDLYDVR 240
QY 241 RPWYIOGAASPKDMLILVDVSGVSGTLTKLIRTSVSEMLETISDDDDFVNVASFNSNAQD 300
Db 241 RPWYIOGAASPKDMLILVDVSGVSGTLTKLIRTSVSEMLETISDDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDVANNITAKGITYDKGFSFAFEOALLNVNVRANCNKIIML 360
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QY 361 FTDGGEERAQEIFNKYKDKKVRVFRFSVQHNRYERGPQIOMACENKGYIYEIPSGAIR 420
Db 361 FTDGGEERAQEIFNKYKDKKVRVFRFSVQHNRYERGPQIOMACENKGYIYEIPSGAIR 420
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Db 421 INTQEYLDVLRPMVLAGKAKQVQNTVYLDALGLVITGTLPVFNITGTQFENKTNLK 480
QY 481 NOLLILGVMGVDSVLEDDIKRLTTPFTLCPNGYFAIDPNGYVLLHPNLPKPKSQEPVTL 540

Db 481 NQLILGVMGVDSLEDIKRLTPRTLCPNNGYFAIDPNGVLLHPNLQPNKSPQEPVTL 540
QY 541 DFDAELENDIKVEIRNKMDIGSEGEKTRTLVKSDERYIDKGNRTYTWTVPNGTDYSL 600
Db 541 DFDAELENDIKVEIRNKMDIGSEGEKTRTLVKSDERYIDKGNRTYTWTVPNGTDYSL 600
QY 601 ALVLPYSFYIKAKLEETITQARSKKGMKDSKSETLKPONFESGYTFIAPRDYCNLDKI 660
Db 601 ALVLPYSFYIKAKLEETITQARY-----SETLKPONFESGYTFIAPRDYCNLDKI 653
QY 661 SDNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYWSKQKNIGVKAR 720
Db 654 SDNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYWSKQKNIGVKAR 713
QY 721 FVYDGGITRVYKPEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 714 FVYDGGITRVYKPEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 773
QY 781 MVSKEVEIYQGLKPAVVGKIDVNSWENFTKTSIRPCAGPVCDCKRNSDVMDCVI 840
Db 774 MVSKEVEIYQGLKPAVVGKIDVNSWENFTKTSIRPCAGPVCDCKRNSDVMDCVI 833
QY 841 LDDGGFLMANHDDYTNQIGREFGEIDPDLMRHLNIVSYAFNKSVDYQSVCEPGAAPKQ 900
Db 834 LDDGGFLMANHDDYTNQIGREFGEIDPDLMRHLNIVSYAFNKSVDYQSVCEPGAAPKQ 893
QY 901 GAGHRSAYVPSVADIQIGWATAAWSILOQFLSLTTPRLEAVEMEDDDFTASLSKQ 960
Db 894 GAGHRSAYVPSVADIQIGWATAAWSILOQFLSLTTPRLEAVEMEDDDFTASLSKQ 953
QY 961 SCITEQTYFFDNDSKFSGLDGCNCRIFHCEKLMNTNLIFIMVESGTCPCDTRLLI 1020
Db 954 SCITEQTYFFDNDSKFSGLDGCNCRIFHCEKLMNTNLIFIMVESGTCPCDTRLLI 1013
QY 1021 QAEQTSQGNPCDMVKQPRYKGPDPVCFDNNVLEDYDCGGVSGNPLSLWYIIGIOFLLL 1080
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QY 1081 WLVSQSTHRL 1091
Db 1074 WLVSQSTHRL 1084

RESULT 11

US-08-455-543A-53

; Sequence 53, Application US/08455543A

; Patent No. 5792846

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; TITLE OF INVENTION: METHODS

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSES: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

; CITY: San Diego

; STATE: California

; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSeq Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/455,543A

; FILING DATE: May 31, 1995

; PRIOR APPLICATION DATA:

;

; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 53:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1103 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-455-543A-53

Query Match

Best Local Similarity 98.7%; Score 5672; DB 1; Length 1103;

Matches 1083; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY 1 MAAGCLLALTLTFLQSLLLIGPSSEEPFSAVTIKSWDKMQEDLVTAKTASGVNQLVDI 60
Db 1 MAAGCLLALTLTFLQSLLLIGPSSEEPFSAVTIKSWDKMQEDLVTAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHWRDFASN 120
Db 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHWRDFASN 120
QY 121 EYVYNAKDDLPEDKNDSPGSGRIKPVIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
Db 121 EYVYNAKDDLPEDKNDSPGSGRIKPVIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNMTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPWVDSRTPNKIDLYDVR 240
Db 181 NELNMTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPWVDSRTPNKIDLYDVR 240
QY 241 RPWYIQGAASPKDMLILVDVSGVSLTTLKLTISVSEMLETLSDDDDFNVASFNSNAQD 300
Db 241 RPWYIQGAASPKDMLILVDVSGVSLTTLKLTISVSEMLETLSDDDDFNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKADVNNITAKGITYKKGFSFAFOLLNANVSRANCKIIML 360
Db 301 VSCFQHLVQANVRNKKVLKADVNNITAKGITYKKGFSFAFOLLNANVSRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYKNDKVRVFRFSYQHNRYERGPQIWMACENKGYIYEIPISGAIR 420
Db 361 FTDGGEERAQEIFNKYKNDKVRVFRFSYQHNRYERGPQIWMACENKGYIYEIPISGAIR 420

QY 421 INTQYLDVLRPMVLADGKAKQVQWNTVYLDALGLVITGTLFVFNITGOFENKTNLK 480
Db 421 INTQYLDVLRPMVLADGKAKQVQWNTVYLDALGLVITGTLFVFNITGOFENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTPRFLCPNGYYFAIDPNGYVLLHNPLOPK----- 530
Db 481 NOLILGVMGVDVSLIEDIKRLTPRFLCPNGYYFAIDPNGYVLLHNPLOPKFGVGIPTIN 540
QY 531 -----NPKSQEPVTLDFDALENDIKVEIRKMKIDGESGKTFRTLVKSODERYI 581
Db 541 LRKRPNIONPKSQEPVTLDFDALENDIKVEIRKMKIDGESGKTFRTLVKSODERYI 600
QY 582 DKGNTYTWTPVNGDYSLALVLPYSYIIKAKLEETITQARSKGKMKOSETLKPONF 641
Db 601 DKGNTYTWTPVNGDYSLALVLPYSYIIKAKLEETITQARY-----SETLKPONF 653
QY 642 EBSGTYFTAPRYCNDLKISDNTEFLNFEFIDRKTPNPNPCNADLINRVLLDAGETN 701
Db 654 EBSGTYFTAPRYCNDLKISDNTEFLNFEFIDRKTPNPNPCNADLINRVLLDAGETN 713
QY 702 ELVQYWSKQKNIKGVARFVVDGGITRVYPKEAGENQWENPETYEDSFYKRSLDNDNY 761
Db 714 ELVQYWSKQKNIKGVARFVVDGGITRVYPKEAGENQWENPETYEDSFYKRSLDNDNY 773
QY 762 VFTAFYFNKSGPGAYESGIMVSKAVEIYIQGKLLKPAVVVGKIDVNSWIENTFTKTSIRDP 821
Db 774 VFTAFYFNKSGPGAYESGIMVSKAVEIYIQGKLLKPAVVVGKIDVNSWIENTFTKTSIRDP 833
QY 822 CAGPVCDCRNSDVMDCVILDDGGFLMANHDDYTNQIGRFFGETDPSLMRHLVNSIYA 881
Db 834 CAGPVCDCRNSDVMDCVILDDGGFLMANHDDYTNQIGRFFGETDPSLMRHLVNSIYA 893
QY 882 FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAWSILOQFLSLTPPR 941
Db 894 FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAWSILOQFLSLTPPR 953
QY 942 LLEAVEMEDDDFTASLSKOSCIITEQTQYFFDNDSKSFSGVLDCGNCRIFFHGEKLMNTNL 1001
Db 954 LLEAVEMEDDDFTASLSKOSCIITEQTQYFFDNDSKSFSGVLDCGNCRIFFHGEKLMNTNL 1013
QY 1002 IFIMVESKGTCPCDTRLIIQAEQTSQSDGNPCDMVKQPRYKGPVDFVNNVLEDYTDGCG 1061
Db 1014 IFIMVESKGTCPCDTRLIIQAEQTSQSDGNPCDMVKQPRYKGPVDFVNNVLEDYTDGCG 1073
QY 1062 VSGLNPSLWYIIGIOFLMLVLSGSTRLL 1091
Db 1074 VSGLNPSLWYIIGIOFLMLVLSGSTRLL 1103

RESULT 12
US-08-223-305C-53
; Sequence 53, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA: US/08/223.305C
APPLICATION NUMBER: US/08/223.305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 1103 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-53

Query Match 98.7%; Score 5672; DB 2; Length 1103;
Best Local Similarity 97.6%; Pred. No. 0;
Matches 1083; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY 1 MAAGCLLALTLTLFQSLIGPSSSEPPFSAVTIKSWDKMQEDLVTLAKTAGVGNQLVDI 60
Db 1 MAAGCLLALTLTLFQSLIGPSSSEPPFSAVTIKSWDKMQEDLVTLAKTAGVGNQLVDI 60
QY 61 YEKYODLYTVEPNARQLVEIAARDIEKLLNSRKALVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYODLYTVEPNARQLVEIAARDIEKLLNSRKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROISTYQHAHVHTPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROISTYQHAHVHTPTDIYEGSTIVL 180
QY 181 NELNWT SALDEVFKKNREEDPSLLQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
Db 181 NELNWT SALDEVFKKNREEDPSLLQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
QY 241 RPWYIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSMLETLSDDDFVNVASFNSNAQD 300
Db 241 RPWYIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSMLETLSDDDFVNVASFNSNAQD 300
QY 301 VSCFOHLVQAVNRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNVNVRANCNKIIML 360
Db 301 VSCFOHLVQAVNRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNVNVRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKNKDKKVRFRFSVQGHNYERGPIONMACENKGYIYEIPSGAIR 420

Db 361 FTGGGAEQIENKYNKKVRFSGQHNYERGPQWACENKGYIIEPSIGAIR 420
QY 421 INTQEYLDVLRPMVLGAKQVQVNTYLDALGLGLVITGTLPVFNITGOFENKTNLK 480
Db 421 INTQEYLDVLRPMVLGAKQVQVNTYLDALGLGLVITGTLPVFNITGOFENKTNLK 480
QY 481 NQILGVMGVDVSLSDIKRLTPRFTLCPNGYFAIDPNNGYVLLHPLNLPK-----530
Db 481 NQILGVMGVDVSLSDIKRLTPRFTLCPNGYFAIDPNNGYVLLHPLNLPK-----530
QY 531 -----NPKSOEPTVLDLDAELNDIKVEIRNKMIDGESGKFTFLVKSQDERYI 581
Db 541 LKRRRNIONPKSQEPTVLDLDAELNDIKVEIRNKMIDGESGKFTFLVKSQDERYI 600
QY 582 DKGNRITYTTPVNGTDYSLALVLPYTFYIYKAKLEETITQARSKKMKDSETLKPDNF 641
Db 601 DKGNRITYTTPVNGTDYSLALVLPYTFYIYKAKLEETITQARY-----SETLKPDNF 653
QY 642 EESGYTFIAPRDCNDLKISDNNTEFLNFEIDRKTNNPSCNADLINRVLLDAGFTN 701
Db 654 EESGYTFIAPRDCNDLKISDNNTEFLNFEIDRKTNNPSCNADLINRVLLDAGFTN 713
QY 702 ELQNTYWSKQKNIKGVKARFVTDGGITRVYKAEAGENNQENPETYEDSFYKRSLDNDNY 761
Db 714 ELQNTYWSKQKNIKGVKARFVTDGGITRVYKAEAGENNQENPETYEDSFYKRSLDNDNY 773
QY 762 VFTAPYFNKSGGAYESGIMVSKAVEIYIOGKLLKPAVVGIKIDVNSWIENFTKTSIRDP 821
Db 774 VFTAPYFNKSGGAYESGIMVSKAVEIYIOGKLLKPAVVGIKIDVNSWIENFTKTSIRDP 833
QY 822 CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTNQIGRFFGEIDPSLMRHLNYSVYA 881
Db 834 CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTNQIGRFFGEIDPSLMRHLNYSVYA 893
QY 882 FNKSYDQSVCEPGAAPKQAGHRSAYVPSVADILQIGWATAAASIIQOFLLSLTFFR 941
Db 894 FNKSYDQSVCEPGAAPKQAGHRSAYVPSVADILQIGWATAAASIIQOFLLSLTFFR 953
QY 942 LLEAVEMEDDDFTASLSKQSCITEQYQFFDNDKSFSGVLDCGNCRIFFHGEKLMNTNL 1001
Db 954 LLEAVEMEDDDFTASLSKQSCITEQYQFFDNDKSFSGVLDCGNCRIFFHGEKLMNTNL 1013
QY 1002 IFIMVESKTCPCDTRFLLLQAEQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDYTDGCG 1061
Db 1014 IFIMVESKTCPCDTRFLLLQAEQTSQGNPCDMVKQPRYKRGPDVCFDNNVLEDYTDGCG 1073
QY 1062 VSGLNPSLWYIIGIQFLLLWLVSGSTHRL 1091
Db 1074 VSGLNPSLWYIIGIQFLLLWLVSGSTHRL 1103

RESULT 13
US-08-455-543A-55
; Sequence 55, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESS: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1079 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-55

Query Match 98.3%; Score 5652; DB 1; Length 1079;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 1078; Conservative 0; Mismatches 1; Indels 12; Gaps 2;
QY 1 MAAGCILLALTTLFOSLLIGSPSEPPFSAVTKSWDKMQEDLVTLAKTAGVNLVDI 60
Db 1 MAAGCILLALTTLFOSLLIGSPSEPPFSAVTKSWDKMQEDLVTLAKTAGVNLVDI 60
QY 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLLSNRSLVSLALEAEKVQAAHWRDFASN 120
Db 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLLSNRSLVSLALEAEKVQAAHWRDFASN 120
QY 121 EYVYVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGRQISYQHAHVHIPTDIYEGSTIVL 180
Db 121 EYVYVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGRQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTSLALDEYFKKNREDDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
Db 181 NELNWTSLALDEYFKKNREDDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
QY 241 RPYITQGAASPKDMLILVDVSGVSLTLLKLTYSVSEMLETLSDDDFYNVASFNSNAOD 300
Db 241 RPYITQGAASPKDMLILVDVSGVSLTLLKLTYSVSEMLETLSDDDFYNVASFNSNAOD 300

QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQQLLNNVSRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQQLLNNVSRANCNKIIML 360
QY 361 FTDGGERAQEILFNKYNKDKVYRFVSQGHYERGPIONMACENKGYIYIPISGAIR 420
Db 361 FTDGGERAQEILFNKYNKDKVYRFVSQGHYERGPIONMACENKGYIYIPISGAIR 420
QY 421 INTQYLDVLGRPMVLGADKAKQVQWNTVYLDALGLVITGTPVENITGQFENKTNL 480
Db 421 INTQYLDVLGRPMVLGADKAKQVQWNTVYLDALGLVITGTPVENITGQFENKTNL 480
QY 481 NOLLILGVMGVDVSLDIKRLTFRFLCPNGYFAIDPNGYVLLHNLQPNKPSQEPVTL 540
Db 481 NOLLILGVMGVDVSLDIKRLTFRFLCPNGYFAIDPNGYVLLHNLQPNKPSQEPVTL 540
QY 541 DFLDALENDIKVEIRNKKMIDGESKTEKTRTLVKSDERYIDKGNRTYTWTVPNGTDSL 600
Db 541 DFLDALENDIKVEIRNKKMIDGESKTEKTRTLVKSDERYIDKGNRTYTWTVPNGTDSL 600
QY 601 ALVLPYTFYIIKALEETITQARSKKGMKDSKTLKPNFESGYTFTAPRDYCNLKI 660
Db 601 ALVLPYTFYIIKALEETITQARSKKGMKDSKTLKPNFESGYTFTAPRDYCNLKI 660
QY 661 SONTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELQVYNSKQKNIKGVKAR 720
Db 661 SONTEFLNFEIDRKTTPNPNPCNADLINRVLLDAGFTNELQVYNSKQKNIKGVKAR 720
QY 721 FVYTDGTRVYPKENAGNENQENPETYEDSFYKRSLDNDNYFTTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGTRVYPKENAGNENQENPETYEDSFYKRSLDNDNYFTTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSHNTFTKTSIRDPKAGVPCDCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSHNTFTKTSIRDPKAGVPCDCKRNSDVMDCVI 840
QY 841 LDGQFLMANHDDTYNQIGREFGEIDPSLMRHLNVSIVYAFNKSVDYQSVCEPGAAPKQ 900
Db 841 LDGQFLMANHDDTYNQIGREFGEIDPSLMRHLNVSIVYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAWSLLOQFLSLTPRLEAVEDEDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAWSLLOQFLSLTPRLEAVEDEDDFTASLSKQ 960
QY 961 SCITEQTYFFDNDKSKFSGLVDCGNCNCRIFHGEKLMNTNLIIFINVESKGTCPDTRLLI 1020
Db 961 SCITEQTYFFDNDKSKFSGLVDCGNCNCRIFHGEKLMNTNLIIFINVESKGTCPDTRLLI 1020
QY 1021 QAEQTSQGNPCDMVKQPRYKGPVCFDNNVLEDYTDGCGVSGLNPSLWYIIGIQFLL 1080
Db 1021 QAEQTSQGNPCDMVKQPRYKGPVCFDNNVLEDYTDGCGVSGLNPSLWYIIGIQFLL 1080
QY 1081 WLVSQSTHRL 1091
Db 1081 WLVSQSTHRL 1091

RESULT 14

US-08-223-305C-55
Sequence 55, Application US/08223305C
Patent No. 5851824

GENERAL INFORMATION:

APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:

ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/223,305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
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PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1079 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-55

Query Match 98.3%; Score 5652; DB 2; Length 1079;

Best Local Similarity 98.8%; Fred. No. 0;

Matches 1078; Conservative 0; Mismatches 1; Indels 12; Gaps 2;

QY 1 MAAGCLLALTTLFQSLIGPSSEPPFPSPAVTIKSWDKMQEDLVTLAKTAGSVNQLVDI 60
Db 1 MAAGCLLALTTLFQSLIGPSSEPPFPSPAVTIKSWDKMQEDLVTLAKTAGSVNQLVDI 60
QY 61 YEKYQDLYTVPNNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQRWEDFASN 120
Db 61 YEKYQDLYTVPNNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQRWEDFASN 120
QY 121 EVVYVNAKDDLDPEKNDSEPGSORIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Db 121 EVVYVNAKDDLDPEKNDSEPGSORIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSSALDEVFKKNREDDPSLLMQVFGSATGLARYYPASWPVDSNRTPNKIDLYDVR 240
Db 181 NELNWTSSALDEVFKKNREDDPSLLMQVFGSATGLARYYPASWPVDSNRTPNKIDLYDVR 240

QY 241 RPYIOGAASPKDMLILVDVSGSVGLTLKLIIRTSVSEMLETLSDDDDFVNVASFNSAOD 300
Db 241 RPYIOGAASPKDMLILVDVSGSVGLTLKLIIRTSVSEMLETLSDDDDFVNVASFNSAOD 300
QY 301 VSCFQHLVQANVKNKVLKDAVNNTAKGTDYKKGFSAFQOLLNLYNVRANCNKIIML 360
Db 301 VSCFQHLVQANVKNKVLKDAVNNTAKGTDYKKGFSAFQOLLNLYNVRANCNKIIML 360
QY 361 FTGGERAQEIPFNKNKDKKVVRFVSQGHNYRGPIQWMACENKGYIYEIPSGAIR 420
Db 361 FTGGERAQEIPFNKNKDKKVVRFVSQGHNYRGPIQWMACENKGYIYEIPSGAIR 420
QY 421 INTQEVLDVLRPMVLGAKAKOVQNTNYLDALGLVITGTLPLFNITGOFENKTNLK 480
Db 421 INTQEVLDVLRPMVLGAKAKOVQNTNYLDALGLVITGTLPLFNITGOFENKTNLK 480
QY 481 NOLILGVMGVDSLEDIKRLTPFTLPCNGYFPAIDPNGYVLLHPLNLPKPKSQEPVTL 540
Db 481 NOLILGVMGVDSLEDIKRLTPFTLPCNGYFPAIDPNGYVLLHPLNLPKPKSQEPVTL 540
QY 541 DFDALENDIKVEIRKNKIDGESGKTRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFDALENDIKVEIRKNKIDGESGKTRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
QY 595 DFDALENDIKVEIRKNKIDGESGKTRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 595
QY 601 ALVLPYTSFYIKAKLEETITQARSKKKMDSETLKPDPNFESGYTFTAPRDYCNLDKI 560
Db 596 ALVLPYTSFYIKAKLEETITQARSKKKMDSETLKPDPNFESGYTFTAPRDYCNLDKI 560
QY 661 SDNTEFLNFEIDRKTNNPNSCNADLINRVLNLDAGFTNELVQYNSKQKNIKGVKAR 720
Db 649 SDNTEFLNFEIDRKTNNPNSCNADLINRVLNLDAGFTNELVQYNSKQKNIKGVKAR 708
QY 721 FVYTDGGITRVPKEAGENQWNPETIEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
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RESULT 15

US-08-435-675B-5
; Sequence 5, Application US/08435675B
; Patent No. 5710250
; GENERAL INFORMATION:
; APPLICANT: Ellis, Steven Bradley
; APPLICANT: Williams, Mark E.
; APPLICANT: Harpold, Michael Miller
; APPLICANT: Schwartz, Arnold
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: CALCIUM CHANNEL COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: CA
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/435,675B
FILING DATE: 05-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/314,083
FILING DATE: 28-SEP-1994
APPLICATION NUMBER: US 07/914,231
FILING DATE: 13-JUL-1992
APPLICATION NUMBER: US 07/603,751
FILING DATE: 08-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-53193
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-238-0999
TELEFAX: 619-238-0062
TELEX:
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 1106 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-435-675B-5

Query Match 95.8%; Score 5508.5; DB 1; Length 1106;
Best Local Similarity 94.7%; Pred. No. 0;
Matches 1054; Conservative 15; Mismatches 15; Indels 29; Gaps 4;
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 Date: Jun 8, 2001 7:49 PM
 About: Results were produced by the GenCore software, version 4.5.
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Search information block:

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seq_documentation_block:

; Sequence 24, Application US/07745206A
 ; Patent No. 5429921
 ; GENERAL INFORMATION:
 ; APPLICANT: Harpold, Michael
 ; APPLICANT: Ellis, Steven
 ; APPLICANT: Williams, Mark
 ; APPLICANT: McCue, Ann
 ; APPLICANT: Feldman, Daniel
 ; TITLE OF INVENTION: Human Calcium Channel Compositions and
 ; TITLE OF INVENTION: Methods
 ; NUMBER OF SEQUENCES: 32
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Fitch, Even, Tabin & Flannery
 ; STREET: 135 S. LaSalle
 ; CITY: Chicago
 ; STATE: Illinois
 ; COUNTRY: U.S.A.
 ; ZIP: 60603
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/745,206A
 ; FILING DATE: 19910815
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Feder, Scott B
 ; REFERENCE/DOCKET NUMBER: 51504
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 312-372-7842
 ; INFORMATION FOR SEQ ID NO: 24:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 3566 base pairs
 ; TYPE: NUCLEIC ACID
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: DNA (genomic)
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 1..3273
 ; US-07-745-206A-24

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Quality: 5748.00 Length: 1091
 Ratio: 5.269 Gaps: 0
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; Sequence 24, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506

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; Sequence 33, Application US/08455543A

; Patent No. 5792846

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

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; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Hallier & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
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; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
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; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
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; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
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; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 33:
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: Patent No. 5846757
: GENERAL INFORMATION:
: APPLICANT: Harpold, Michael
: APPLICANT: Ellis, Steven
: APPLICANT: Williams, Mark
: APPLICANT: Feldman, Daniel
: APPLICANT: McCue, Ann
: APPLICANT: Brenner, Robert
: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
: NUMBER OF SEQUENCES: 29
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: BROWN, MARTIN, HALLER & McCLAIN
: STREET: 1660 UNION STREET
: CITY: SAN DIEGO
: STATE: CA
: COUNTRY: USA
: ZIP: 92101


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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
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; FILING DATE: 04-APR-1989
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; APPLICATION NUMBER: WO PCT/US89/01408
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; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3600 base pairs
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; STRANDEDNESS: double
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: Patent No. 5874236
: GENERAL INFORMATION:
: APPLICANT: Harpold, Michael
: APPLICANT: Ellis, Steven
: APPLICANT: Williams, Mark
: APPLICANT: Feldman, Daniel
: APPLICANT: McCue, Ann
: APPLICANT: Brenner, Robert
: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
: METHODS
: NUMBER OF SEQUENCES: 40
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Brown, Martin, Haller & McClain
: STREET: 1660 Union Street
: CITY: San Diego
: STATE: California
: COUNTRY: USA
: ZIP: 92101-2926
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/149,097D
: FILING DATE: 03-NOV-1993
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/105,536
: FILING DATE: 11-AUG-1993
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: WO PCT/US92/06903
: FILING DATE: 14-AUG-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/914,231
: FILING DATE: 13-JUL-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/868,354
: FILING DATE: 10-APR-1992
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: APPLICATION NUMBER: US 07/745,206
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: FILING DATE: 04-APR-1989
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: APPLICATION NUMBER: WO PCT/US89/01408
: FILING DATE: 04-APR-1989
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/176,899
: FILING DATE: 04-APR-1988
: ATTORNEY/AGENT INFORMATION:
: NAME: Seidman, Stephanie L.
: REGISTRATION NUMBER: 33,779
: REFERENCE/DOCKET NUMBER: 6362-55038
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (619) 238-0999
: TELEFAX: (619) 238-0062
: INFORMATION FOR SEQ ID NO: 11:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 3600 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)

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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; APPLICANT: Feldman, Daniel
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/450,562
; FILING DATE:
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  FILING DATE: 13-MAR-1995
  APPLICATION NUMBER: 08/336,257
  FILING DATE: 7-NOV-1994
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    FILING DATE: 28-SEPT-1994
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    APPLICATION NUMBER: 08/290,012
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  APPLICATION DATA:
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    FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
  NAME: Seidman, Stephanie L.
  REGISTRATION NUMBER: 33,779
  REFERENCE/DOCKET NUMBER: 6362-519812
TELECOMMUNICATION INFORMATION:
  TELEPHONE: (619) 238-0999
  TELEFAX: (619) 238-0062
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; Patent No. 6040436
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL

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; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Millitia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3298 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 20..3292
; US-08-713-118-3

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; Sequence 3, Application US/09452007
; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3298 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 20..3292
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seq_documentation_block:
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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California

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? COUNTRY: USA
? ZIP: 92101-2926
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Diskette
? COMPUTER: IBM Compatible
? OPERATING SYSTEM: DOS
? SOFTWARE: FASTSEQ Version 1.5
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/455,543A
? FILING DATE: May 31, 1995
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: 08/223,305
? FILING DATE: April 4, 1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: 07/868,354
? FILING DATE: April 10, 1992
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 07/745,206
? FILING DATE: 15-AUG-1991
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 07/620,250
? FILING DATE: 30-NOV-1990
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 07/482,384
? FILING DATE: 20-FEB-1990
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 07/603,751
? FILING DATE: 04-APR-1989
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? APPLICATION NUMBER: WO PCT/US89/01408
? FILING DATE: 04-APR-1989
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 07/176,899
? FILING DATE: 04-APR-1988
? ATTORNEY/AGENT INFORMATION:
? NAME: Seigman, Stephanie L.
? REGISTRATION NUMBER: 33,779
? TELECOMMUNICATION INFORMATION:
? REFERENCE/DOCKET NUMBER: 6362-52517
? TELEPHONE: (619)238-0999
? TELEFAX: (619)238-0062
? INFORMATION FOR SEQ ID NO: 20:
? SEQUENCE CHARACTERISTICS:
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; Patent No. 5792846

; GENERAL INFORMATION:

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; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; NUMBER OF SEQUENCES: 57

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; STREET: 1660 Union Street

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; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSeq Version 1.5

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 ; FILING DATE: April 4, 1994
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 ; FILING DATE: April 10, 1992
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 ; FILING DATE: 15-AUG-1991
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/620,250
 ; FILING DATE: 30-NOV-1990
 ; PRIOR APPLICATION DATA:
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 ; FILING DATE: 20-FEB-1990
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 ; APPLICATION NUMBER: US 07/603,751
 ; FILING DATE: 04-APR-1989
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 ; APPLICATION NUMBER: WO PCT/US89/01408
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 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/176,899
 ; FILING DATE: 04-APR-1988
 ; ATTORNEY/AGENT INFORMATION:
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3020 TTAATATTCAATATGTTGAGAGCAAGGAGACATGTCCATGTGACACACG 3069
1017 gLeuLeuIleGlnAlaGluGlnThrSerAspGlyProAsnProCysAspM 1034
|||||
3070 ACTGCTCATACAGCGGAGCAGACTTCTGACGGTCCAAATCCTTGTGACA 3119
1034 etValLysGlnProArgTyrArgLysGlyProAspValCysPheAspAsn 1050
|||||
3120 TGCTTAAGCAACCTAGATACCGAAAGGCCCTCATGCTGCTTGATAAC 3169
1051 AsnValLeuGluAspTyrThrAspCysGlyGlyValSerGlyLeuAsnPr 1067
|||||
3170 AATGCTCTGGAGCATATATCTGACTGTGTGGTGTGTTCTGGATTAAATCC 3219
1067 oSerLeuTTPtYrIleIleGlyIleGlnPheLeuLeuTTPLeuValS 1084
|||||
3220 CTCCTGTGTATATCATTTGGAATCCAGTTTCTACTACTTTGGCTGGTAT 3269
1084 erGlySerThrHisArgLeuLeu 1091
|||||
3270 CTGGCAGCACACACCGGCTGTTA 3292

1 MAAGCLLALTLFQSLLLTGPSSSEPPSAVTIKSWDKMQEDLVTLAKTASGVNLVDI 60
 |||||
 1 MAAGCLLALTLFQSLLLTGPSSSEPPSAVTIKSWDKMQEDLVTLAKTASGVNLVDI 60
 |||||

QY 61 YEKYQDLYTVEPNNAQVLAARIEKLLSNRSKALVSLAEAEKVQAAHQRDFASN 120
Db 61 YEKYQDLYTVEPNNAQVLAARIEKLLSNRSKALVSLAEAEKVQAAHQRDFASN 120
QY 121 EVVYNAKDDLPKNDSPGSGRIKPVIEDANRGQISYQAAVHIPTDIYESTIVL 180
Db 121 EVVYNAKDDLPKNDSPGSGRIKPVIEDANRGQISYQAAVHIPTDIYESTIVL 180
QY 181 NELNMTSALDEYFKKRNEDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
Db 181 NELNMTSALDEYFKKRNEDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
QY 241 RPYTOGAASPDMLILVDVSGVSGLTUKLRTSVSEMLETSLDDDFNVASFNSAQD 300
Db 241 RPYTOGAASPDMLILVDVSGVSGLTUKLRTSVSEMLETSLDDDFNVASFNSAQD 300
QY 301 VSCFOHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFQOLLNINVRANCNKIIML 360
Db 301 VSCFOHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFQOLLNINVRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKNYKDKVRFVSQGHYERGPIONMACENKGYIYIPISGAI 420
Db 361 FTDGGEERAQEIFNKNYKDKVRFVSQGHYERGPIONMACENKGYIYIPISGAI 420
QY 421 INTQEVLDVGRPMVLADKAKQVQWNTVYLDLELGLVITGTLVPFNITGOFENKTNLK 480
Db 421 INTQEVLDVGRPMVLADKAKQVQWNTVYLDLELGLVITGTLVPFNITGOFENKTNLK 480
QY 481 NOLILGVMGVDSLEDIKRLTFRFTLCPNGYVFAIDPNGYVLLHNPLOPKNPKSOEPTVL 540
Db 481 NOLILGVMGVDSLEDIKRLTFRFTLCPNGYVFAIDPNGYVLLHNPLOPKNPKSOEPTVL 540
QY 541 DFLDAELENDIKVEIRNKMIDGESGEKFTLVKSDQERYIDKGNRTYVTPVNGTDYSL 600
Db 541 DFLDAELENDIKVEIRNKMIDGESGEKFTLVKSDQERYIDKGNRTYVTPVNGTDYSL 600
QY 601 ALVLTYSFYIYKALEETITQARSKKGMKDSFELKPDNFESGYTTIAPRDYCNLUKI 660
Db 601 ALVLTYSFYIYKALEETITQARSKKGMKDSFELKPDNFESGYTTIAPRDYCNLUKI 660
QY 661 SDNNTFLLNFNEFIDRTPNPNPCNADLINRVLLDAGFTNELVONYSKQKNIKGVKAR 720
Db 661 SDNNTFLLNFNEFIDRTPNPNPCNADLINRVLLDAGFTNELVONYSKQKNIKGVKAR 720
QY 721 FVYTDGTRVYPKEAGENWQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGTRVYPKEAGENWQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGIKIDVNSWIEFTKTSIRDPGAGVPCDCKRNSDVDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGIKIDVNSWIEFTKTSIRDPGAGVPCDCKRNSDVDCVI 840
QY 841 LDGQFLLMANHDDVTNOLIGFWATAAAMSLQOFLSLFPPRLLEAVEMEDDDFTASLSKQ 900
Db 841 LDGQFLLMANHDDVTNOLIGFWATAAAMSLQOFLSLFPPRLLEAVEMEDDDFTASLSKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAAMSLQOFLSLFPPRLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAAMSLQOFLSLFPPRLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITOTQYFFNDKSGSVLDCGNCRIFHGEKLMNTNLFIMVESKGTGCPDCTRL 1018
Db 961 SCITOTQYFFNDKSGSVLDCGNCRIFHGEKLMNTNLFIMVESKGTGCPDCTRL 1018

RESULT 2
US-08-455-543A-52
; Sequence 52, Application US/0845543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-455-543A-52

Query Match 100.0%; Score 5346; DB 1; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1018; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLTFLQSLIGPSSPEFPFSAVTKSWDKMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTTLTFLQSLIGPSSPEFPFSAVTKSWDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQVLAARIEKLLSNRSKALVSLAEAEKVQAAHQRDFASN 120

Db 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EYVYNAKDDLPDPEKNDSEPGSQRKPVFIEDANRGQISYQRAAHVHIPTDIYEGSTIVL 180
Db 121 EYVYNAKDDLPDPEKNDSEPGSQRKPVFIEDANRGQISYQRAAHVHIPTDIYEGSTIVL 180
QY 181 NELNMTSALDEYFKKRNEDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
Db 181 NELNMTSALDEYFKKRNEDPSLLMQVFGSATGLARYYPASVPWVNSRTPNKIDLYDVR 240
QY 241 RPWYTOGAASPDMLILVDVSGVSLGLTLKLRISYSEMLETSLDDDFVNVASFNSNAQD 300
Db 241 RPWYTOGAASPDMLILVDVSGVSLGLTLKLRISYSEMLETSLDDDFVNVASFNSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDVANNITAKITDYKKGFSFAFQOLLNINVSRRANCKIIML 360
Db 301 VSCFOHLVQANVRNKKVLDVANNITAKITDYKKGFSFAFQOLLNINVSRRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYNDKKVRFVSQGHYERGPQIOMMACENKGYIYIPISGAIR 420
Db 361 FTDGGEERAQEIFNKYNDKKVRFVSQGHYERGPQIOMMACENKGYIYIPISGAIR 420
QY 421 INTQYLDVLRPMVLAGDKAKOVQWNTYVLDLGLVITGTLVPFNTTGFENKTNLK 480
Db 421 INTQYLDVLRPMVLAGDKAKOVQWNTYVLDLGLVITGTLVPFNTTGFENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYVFAIDPNGYVLLHNPLOKPKSOEPVTL 540
Db 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYVFAIDPNGYVLLHNPLOKPKSOEPVTL 540
QY 541 DFLDALENDIKVEIRNKMIDGSEKFTLTKVKSQDRIYIDKGNRTYTWTVPNGTDYSL 600
Db 541 DFLDALENDIKVEIRNKMIDGSEKFTLTKVKSQDRIYIDKGNRTYTWTVPNGTDYSL 600
QY 601 ALVLPYISYIYAKLEETITQARSKKGMKQSETLKPDNFESGYTFTAPRDYCNLDKI 660
Db 601 ALVLPYISYIYAKLEETITQARSKKGMKQSETLKPDNFESGYTFTAPRDYCNLDKI 660
QY 661 SDNNTFLLNFEFIDRTPNPNPCNADLINRVLLDAGFTNELVQNSKQNKIGVKAR 720
Db 661 SDNNTFLLNFEFIDRTPNPNPCNADLINRVLLDAGFTNELVQNSKQNKIGVKAR 720
QY 721 FVYTDGTRVYKPEAGENQENPETEDSYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGTRVYKPEAGENQENPETEDSYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPKAGVPCDCRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTSIRDPKAGVPCDCRNSDVMDCVI 840
QY 841 LODGFFLLMANHDDYTNOIGREFGETDPSLMRHLNINISYAFNKSVDYOSVCEPGAAPKQ 900
Db 841 LODGFFLLMANHDDYTNOIGREFGETDPSLMRHLNINISYAFNKSVDYOSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITQOTQFFNDKSGFVLDGNCISRFHGEKLMNTNIFIMVESKGTCPDCTRL 1018
Db 961 SCITQOTQFFNDKSGFVLDGNCISRFHGEKLMNTNIFIMVESKGTCPDCTRL 1018

RESULT 3

US-08-223-305C-52
; Sequence 52, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel

APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/223,305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
LENGTH: 1091 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-52

Query Match 100.0%; Score 5346; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1018; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTLLFQSLIGPSSEEPFSAVTIKSVWDMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTLLFQSLIGPSSEEPFSAVTIKSVWDMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EYVYNAKDDLPDPEKNDSEPGSQRKPVFIEDANRGQISYQRAAHVHIPTDIYEGSTIVL 180

Db 121 EVVYNAKDDLPEKNDSEPGSQRKIPVFIEDANFGRIQISYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNWTLSALDEVKPKNREEDPSLLQVFGSATGLARYYPASPVWDNSRTPNKIDLDYVRR 240
Db 181 NELNWTLSALDEVKPKNREEDPSLLQVFGSATGLARYYPASPVWDNSRTPNKIDLDYVRR 240
QY 241 RPWYIOGAASPKDMLILVDVSGVSGTTLKIRTSVSEMLETSSDDDFVNVASFNSNAQD 300
Db 241 RPWYIOGAASPKDMLILVDVSGVSGTTLKIRTSVSEMLETSSDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQOLLNYSRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQOLLNYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYNKDKKVRFRFVSGQHNRYERGIQWACENKGGYIETPSIGAIR 420
Db 361 FTDGGEERAQEIFNKYNKDKKVRFRFVSGQHNRYERGIQWACENKGGYIETPSIGAIR 420
QY 421 INTQEYLDVLGRPMVLADGAKAKOVQNTNVYLDALGLVITGLPVFNITGQENKTNLK 480
Db 421 INTQEYLDVLGRPMVLADGAKAKOVQNTNVYLDALGLVITGLPVFNITGQENKTNLK 480
QY 481 NQLILGVMGVDSLEDIKRLTPFTLCPCNGYYPFADPNQVLLHPNLPKNPKSQBPVTL 540
Db 481 NQLILGVMGVDSLEDIKRLTPFTLCPCNGYYPFADPNQVLLHPNLPKNPKSQBPVTL 540
QY 541 DFLDAELNDIKVEIRNKMIDGESGKFTFLVKSQDERYDKGNRTYTTPVNGTDYSL 600
Db 541 DFLDAELNDIKVEIRNKMIDGESGKFTFLVKSQDERYDKGNRTYTTPVNGTDYSL 600
QY 601 ALVLPYTSFYIIRAKLEETITQARSKKGMKDSKTLKPDNFEESGYTFIAPRDYCNLDKI 660
Db 601 ALVLPYTSFYIIRAKLEETITQARSKKGMKDSKTLKPDNFEESGYTFIAPRDYCNLDKI 660
QY 661 SDNTEFLNFEFIDKRTPNNSCHADLNIRVLLDAGFNLQVYWSKKNKIGVKAR 720
Db 661 SDNTEFLNFEFIDKRTPNNSCHADLNIRVLLDAGFNLQVYWSKKNKIGVKAR 720
QY 721 FVTDGGITRVPKAGENQWENPETYEDSFYKRSLDNDNYVETAPYFNKSGPGAYESGI 780
Db 721 FVTDGGITRVPKAGENQWENPETYEDSFYKRSLDNDNYVETAPYFNKSGPGAYESGI 780
QY 781 MVSKAVERIYIQGLLPAVVGIIKIDVNSWENFTKTSIRPCAGPVCDCRNSDVMDCVI 840
Db 781 MVSKAVERIYIQGLLPAVVGIIKIDVNSWENFTKTSIRPCAGPVCDCRNSDVMDCVI 840
QY 841 LDDGFFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNSVYAFNKSVDYQSVCEPGAAPKQ 900
Db 841 LDDGFFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNSVYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHRSAYPSVADILQIGWATAAASWILQOFLLSLTFPRLLAEVEMEDDDFTASLSKQ 960
Db 901 GAGHRSAYPSVADILQIGWATAAASWILQOFLLSLTFPRLLAEVEMEDDDFTASLSKQ 960
QY 961 SCITEQYIFFDNDKSFSGVLDCGNCSTRIFHGEKLMNTNLIETIMVESKGTCPDTRL 1018
Db 961 SCITEQYIFFDNDKSFSGVLDCGNCSTRIFHGEKLMNTNLIETIMVESKGTCPDTRL 1018

RESULT 4

US-08-311-363-25
; Sequence 25, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-311-363-25

Query Match 100.0%; Score 5346; DB 2; Length 1091;

Best Local Similarity 100.0%; Pred. No. 0;
Matches 1018; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLTQSLILIGPSEEPFPPSAVTIKSWYDKMKQEDLVTLAKTASGVNQLVDI 60

Db 1 MAAGCLLALTTLTQSLILIGPSEEPFPPSAVTIKSWYDKMKQEDLVTLAKTASGVNQLVDI 60

QY 61 YEKYQDLTYVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAAHQWREDFASN 120

Db 61 YEKYQDLTYVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAAHQWREDFASN 120

QY 121 EVVYNAKDDLPEKNDSEPGSQRKIPVFIEDANFGRIQISYQHAHVHPTDIYEGSTIVL 180

Db 121 EVVYNAKDDLPEKNDSEPGSQRKIPVFIEDANFGRIQISYQHAHVHPTDIYEGSTIVL 180

QY 181 NELNWTLSALDEVKPKNREEDPSLLQVFGSATGLARYYPASPVWDNSRTPNKIDLDYVRR 240

Db 181 NELNWTLSALDEVKPKNREEDPSLLQVFGSATGLARYYPASPVWDNSRTPNKIDLDYVRR 240

QY 241 RPWYIOGAASPKDMLILVDVSGVSGTTLKIRTSVSEMLETSSDDDFVNVASFNSNAQD 300

Db 241 RPWYIOGAASPKDMLILVDVSGVSGTTLKIRTSVSEMLETSSDDDFVNVASFNSNAQD 300

QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQOLLNYSRANCNKIIML 360

Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQOLLNYSRANCNKIIML 360

QY 361 FTDGGEERAQEIFNKYNKDKKVRFRFVSGQHNRYERGIQWACENKGGYIETPSIGAIR 420

Db 361 FTDGGEERAQEIFNKYNKDKKVRFRFVSGQHNRYERGIQWACENKGGYIETPSIGAIR 420

QY 421 INTQEYLDVLGRPMVLADGAKAKOVQNTNVYLDALGLVITGLPVFNITGQENKTNLK 480

Db 421 INTQEYLDVLGRPMVLADGAKAKOVQNTNVYLDALGLVITGLPVFNITGQENKTNLK 480

QY 481 NQLILGVMGVDSLEDIKRLTPFTLCPCNGYYPFADPNQVLLHPNLPKNPKSQBPVTL 540

Db 481 NQLILGVMGVDSLEDIKRLTPFTLCPCNGYYPFADPNQVLLHPNLPKNPKSQBPVTL 540

QY 541 DFLDAELENDIKVEIRNKNMIDGESGKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
DB 541 DFLDAELENDIKVEIRNKNMIDGESGKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYSEYIYKAKLEETITQARSKKGMKDSKSETLKPONFEESGYTFTAPRDYCNLDKI 660
DB 601 ALVLPYSEYIYKAKLEETITQARSKKGMKDSKSETLKPONFEESGYTFTAPRDYCNLDKI 660
QY 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNQLVQYWSKQKNIKGVKAR 720
DB 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNQLVQYWSKQKNIKGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
DB 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCKRNSDVMDCVI 840
DB 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCKRNSDVMDCVI 840
QY 841 LDGGFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNI SYAFNKSVDYOSVCEPGAAPKQ 900
DB 841 LDGGFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNI SYAFNKSVDYOSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLSLTTPRLLLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLSLTTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTQYFFNDNKSFSGLDCGNCRIFFHGEKLMNTNLIFFIMVESKGTCPDTRL 1018
DB 961 SCITEQTQYFFNDNKSFSGLDCGNCRIFFHGEKLMNTNLIFFIMVESKGTCPDTRL 1018

RESULT 5
US-08-713-118-4
; Sequence 4, Application US/08713118
; Patent No. 6040436
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESS: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

; MOLECULE TYPE: protein
US-08-713-118-4

Query Match 99.9%; Score 5342; DB 3; Length 1091;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1017; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MAAGCLLALTLTFLQSLLIGPSSEEPFSAVITKSWDKMQEDLVTLAKTASGVNLVDI 60
DB 1 MAAGCLLALTLTFLQSLLIGPSSEEPFSAVITKSWDKMQEDLVTLAKTASGVNLVDI 60
QY 61 YEKYQDLIYVFNNAARQVIEIAARDIEKLLSNRSLVSLAEAEKVQAAHOREFASN 120
DB 61 YEKYQDLIYVFNNAARQVIEIAARDIEKLLSNRSLVSLAEAEKVQAAHOREFASN 120
QY 121 EYVYNAKDDLPKNDSPGSGRIKPVIEDANFQRIQSYQHAHVHPTDIYEGSTIVL 180
DB 121 EYVYNAKDDLPKNDSPGSGRIKPVIEDANFQRIQSYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNNTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPMVDNSRTPNKIDLYDVR 240
DB 181 NELNNTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPMVDNSRTPNKIDLYDVR 240
QY 241 RPYITQGAASPKDMLILVDYSGVSGTLTKLRTSVSEMLETSLDDDDFVNVSFNSNAQD 300
DB 241 RPYITQGAASPKDMLILVDYSGVSGTLTKLRTSVSEMLETSLDDDDFVNVSFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKADVNNITAKGIDYKKGFSFAFEOLLNYSRANCNKIIML 360
DB 301 VSCFQHLVQANVRNKKVLKADVNNITAKGIDYKKGFSFAFEOLLNYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYKDKKVRVFRFSYQGNHYERGIQWACENKGYIYEPSIGAIR 420
DB 361 FTDGGEERAQEIFNKYKDKKVRVFRFSYQGNHYERGIQWACENKGYIYEPSIGAIR 420
QY 421 INTOEYLDVLRPMVLGAKAKOVQNTVYLDALGLVITGLTPVFNITGOEENKTLK 480
DB 421 INTOEYLDVLRPMVLGAKAKOVQNTVYLDALGLVITGLTPVFNITGOEENKTLK 480
QY 481 NQILIGVMGVDSLEIDKRLTFRFTLCPNGYFAIDPNGYVLLHPLNLPKNPKSQBPVTL 540
DB 481 NQILIGVMGVDSLEIDKRLTFRFTLCPNGYFAIDPNGYVLLHPLNLPKNPKSQBPVTL 540
QY 541 DFLDAELENDIKVEIRNKNMIDGESGKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
DB 541 DFLDAELENDIKVEIRNKNMIDGESGKTRTLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYSEYIYKAKLEETITQARSKKGMKDSKSETLKPONFEESGYTFTAPRDYCNLDKI 660
DB 601 ALVLPYSEYIYKAKLEETITQARSKKGMKDSKSETLKPONFEESGYTFTAPRDYCNLDKI 660
QY 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNQLVQYWSKQKNIKGVKAR 720
DB 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNQLVQYWSKQKNIKGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
DB 721 FVYTDGGITRVYPKEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCKRNSDVMDCVI 840
DB 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCKRNSDVMDCVI 840
QY 841 LDGGFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNI SYAFNKSVDYOSVCEPGAAPKQ 900
DB 841 LDGGFLLMANHDDYTNOIGRFFGEIDPSLMRHLVNI SYAFNKSVDYOSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLSLTTPRLLLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLSLTTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTQYFFNDNKSFSGLDCGNCRIFFHGEKLMNTNLIFFIMVESKGTCPDTRL 1018

Db 961 SCITEQYFFDNDKSGVLDGNCNCSRIFHGEKLMNTNLFIMVESKGTCPDTRL 1018
RESULT 6
US-09-452-007-4
; Sequence 4, Application US/09452007
; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-452-007-4

Query Match 99.9%; Score 5342; DB 4; Length 1091;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1017; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MAAGCLLALTLFOSLLIGPSSSEPPFSAVTIKSWDKMQEDVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTLFOSLLIGPSSSEPPFSAVTIKSWDKMQEDVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHQWREDFASN 120
QY 121 EYVYNNAKDDLPEKNDSPEGSQRKVPFIEDANFGRIQSYQHAHVHIPTDIYEGSTIVL 180
Db 121 EYVYNNAKDDLPEKNDSPEGSQRKVPFIEDANFGRIQSYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTSAIDVEFKKREDDPSLLQWFGSATGLARYYPASPWVDSNRTPNKIDLYDVR 240
Db 181 NELNWTSAIDVEFKKREDDPSLLQWFGSATGLARYYPASPWVDSNRTPNKIDLYDVR 240
QY 241 RPWYIOGAASPKDMLTLVDVSGVSGSLTKLIRTSVSEMLETSLDDDFNVASFNSNAQD 300
Db 241 RPWYIOGAASPKDMLTLVDVSGVSGSLTKLIRTSVSEMLETSLDDDFNVASFNSNAQD 300

QY 301 VSCFOHLYQVANNRNKVKLKDVAVNITAKGITYKKGFSFAFQOLLNYSRANCKNIIML 360
Db 301 VSCFOHLYQVANNRNKVKLKDVAVNITAKGITYKKGFSFAFQOLLNYSRANCKNIIML 360
QY 361 FTDGGEERAQEIFNKYNDKKVVRVFRFVSQGHYERGPQIWMACENKGYIYIPSGAIR 420
Db 361 FTDGGEERAQEIFNKYNDKKVVRVFRFVSQGHYERGPQIWMACENKGYIYIPSGAIR 420
QY 421 INTQEVLDVLRPMVLADGKAKOVQWNTVYLDALGLVITGLPVFNITGOFENKTNLK 480
Db 421 INTQEVLDVLRPMVLADGKAKOVQWNTVYLDALGLVITGLPVFNITGOFENKTNLK 480
QY 481 NQLILGVMGVDVSLIEDIKRLTPRFTLCPCNGYYFAIDPNGYVLLHPLNQLPKNPKSEPVTL 540
Db 481 NQLILGVMGVDVSLIEDIKRLTPRFTLCPCNGYYFAIDPNGYVLLHPLNQLPKNPKSEPVTL 540
QY 541 DFLDAELENDIKVEIRNMKIDGESGEKFTRLVKQSDERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENDIKVEIRNMKIDGESGEKFTRLVKQSDERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYTFYIYKAKLEETITQARSKKGMKDSITLKPDNFESGYTFIAPRDYCNLDKI 660
Db 601 ALVLPYTFYIYKAKLEETITQARSKKGMKDSITLKPDNFESGYTFIAPRDYCNLDKI 660
QY 661 SDNTEFLLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQVNSKQNIKGVKAR 720
Db 661 SDNTEFLLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQVNSKQNIKGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPAYESGI 780
Db 721 FVYTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSHNIENFTKTSIRDPGAGVPCDCKRSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSHNIENFTKTSIRDPGAGVPCDCKRSDVMDCVI 840
QY 841 LDDGGFLMANHDDYTNOIGREFGEIDPSLMRHLNVSIVYAFNKSVDYOSVCEPGAAPKQ 900
Db 841 LDDGGFLMANHDDYTNOIGREFGEIDPSLMRHLNVSIVYAFNKSVDYOSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASILQOFLSLTPRLLLEAVEMEDDDFTASLSQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAASILQOFLSLTPRLLLEAVEMEDDDFTASLSQ 960
QY 961 SCITEQYFFDNDKSGVLDGNCNCSRIFHGEKLMNTNLFIMVESKGTCPDTRL 1018
Db 961 SCITEQYFFDNDKSGVLDGNCNCSRIFHGEKLMNTNLFIMVESKGTCPDTRL 1018

RESULT 7
US-08-455-543A-54
; Sequence 54, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette

361	Db	FTDGGERAQEIEFNKYNKKKRVFRFSPVQHQHYERGP IQMMAcENKNGYYYEIPSTGAIr	420
421	QY	INTQEYLDVLGRPMVLADGAKAKOVMTNYYLDALeLGLVITGTLPVFENITGQFNKTNLk	480
421	Db	INTQEYLDVLGRPMVLADGAKAKOVMTNYYLDALeLGLVITGTLPVFENITGQFNKTNLk	480
481	QY	NQLILGMVGVDVSLEDIKRLTPRFTLCPNGIYPADPNPGYVLLHPLNMQPNKPKSQBPVTL	540
481	Db	NQLILGMVGVDVSLEDIKRLTPRFTLCPNGIYPADPNPGYVLLHPLNMQPNKPKSQBPVTL	535
541	QY	DFLDAELENDIKVEIRNKMIIDGSGSEKTFRTLKVSQDERYIDKGNRTYTWTPVNGDNYDYL	600
536	Db	DFLDAELENDIKVEIRNKMIIDGSGSEKTFRTLKVSQDERYIDKGNRTYTWTPVNGDNYDYL	595
601	QY	ALVLPYTFYIIKAKLEETITQARSKKGMKMDSETLKPDNFEESGYTFIAPRDYCNDLKI	660
596	Db	ALVLPYTFYIIKAKLEETITQARSKKGMKMDSETLKPDNFEESGYTFIAPRDYCNDLKI	655
661	QY	SDNNTFELNFEFIDRKPTPNPNPSCNADLINRVLLDAGFTNELVQWYNSKQNKNIKVGAR	720
656	Db	SDNNTFELNFEFIDRKPTPNPNPSCNADLINRVLLDAGFTNELVQWYNSKQNKNIKVGAR	715
721	QY	FVYTDGGITRVYPKEAGENQWENPEYEDSFYKRSJLDNDNYVFTAPYFNKSGPGAYESGI	780
716	Db	FVYTDGGITRVYPKEAGENQWENPEYEDSFYKRSJLDNDNYVFTAPYFNKSGPGAYESGI	775
781	QY	MVSKAVEIYIQGKLLPAPVVGIKIDYNSWIENFTKTSIRDPcAGPVCDCKRNSDVMDCVI	840
776	Db	MVSKAVEIYIQGKLLPAPVVGIKIDYNSWIENFTKTSIRDPcAGPVCDCKRNSDVMDCVI	835
841	QY	LDDGGFLLMANHDDYTNQIGRFEGEIDPSLMRHLVNIISYAFNKSVDYOSVCEPGAAPKQ	900
836	Db	LDDGGFLLMANHDDYTNQIGRFEGEIDPSLMRHLVNIISYAFNKSVDYOSVCEPGAAPKQ	895
901	QY	GAGHSAYPVPSVADIILQIGWATAAAWSIILQFLLSLTFPRLEAVEMEDDDFTFASLSQK	960
896	Db	GAGHSAYPVPSVADIILQIGWATAAAWSIILQFLLSLTFPRLEAVEMEDDDFTFASLSQK	955
961	QY	SCITEQTOYFFDNDKDSFSGLVDCGNCRSRIFHGHEKILMNTNLNLIIMVESKGTCPCDTRL	1018
956	Db	SCITEQTOYFFDNDKDSFSGLVDCGNCRSRIFHGHEKILMNTNLNLIIMVESKGTCPCDTRL	1013

APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
LENGTH: 1084 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-56

Query Match 98.9%; Score 5289.5; DB 1; Length 1084;

Best Local Similarity 99.2%; Pred. No. 0;

Matches 1010; Conservative 0; Mismatches 1; Indels 7; Gaps 1;

QY 1 MAAGCLLALTTLFQSLGIPSEPPFSAVTKSWDKMQEDLVTLAKTAGVNLVDI 60
Db 1 MAAGCLLALTTLFQSLGIPSEPPFSAVTKSWDKMQEDLVTLAKTAGVNLVDI 60
QY 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALYSLEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLYTVEPNNAQLVEIAARDIEKLLSNRSKALYSLEAEKVQAAHQWREDFASN 120
QY 121 EYVYNAKDDLPDKNDSPGSRQKPVFIEDANFGROISYQHAHVHPTDIYEGSTIVL 180
Db 121 EYVYNAKDDLPDKNDSPGSRQKPVFIEDANFGROISYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNWTSADEYFKKNREDDPSLLQWFGSATGLARYPASPWVDNSRTPNKIDLYDVR 240
Db 181 NELNWTSADEYFKKNREDDPSLLQWFGSATGLARYPASPWVDNSRTPNKIDLYDVR 240
QY 241 RPWYTOGAASPKDMLLVDSVSGSLTLKLRISVSEMLETLSDDDDFVNASFNSNAQD 300
Db 241 RPWYTOGAASPKDMLLVDSVSGSLTLKLRISVSEMLETLSDDDDFVNASFNSNAQD 300
QY 301 VSCFQHLVQANRNKVKLADVANNITAKGITYKGFSAFQOLLNLYNVRANCKNIIML 360
Db 301 VSCFQHLVQANRNKVKLADVANNITAKGITYKGFSAFQOLLNLYNVRANCKNIIML 360
QY 361 FTDGGEERAQEIFNKYNKDKKVRVFRFSVQGHYERGPQWMACENKGYIYIPSIGAIR 420
Db 361 FTDGGEERAQEIFNKYNKDKKVRVFRFSVQGHYERGPQWMACENKGYIYIPSIGAIR 420

QY 421 INTOEYLDVLGRPMVLADKAKOVQMTNVYLDALGLVITGLTPVFNITGOPENKTNLK 480
Db 421 INTOEYLDVLGRPMVLADKAKOVQMTNVYLDALGLVITGLTPVFNITGOPENKTNLK 480
QY 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYFFAIDPNGYVLLHPLNLPKPKSQBPVTL 540
Db 481 NOLILGVMGVDVSLIEDIKRLTFRFTLCPNGYFFAIDPNGYVLLHPLNLPKPKSQBPVTL 540
QY 541 DFLDAELENDIKVEIRNKMIDGESGKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENDIKVEIRNKMIDGESGKTRFTLVKSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYSPYYIKALEETITQARSKKGKMKOSETLKPONFEESGYTFTAPRDYCNLDKI 660
Db 601 ALVLPYSPYYIKALEETITQARSKKGKMKOSETLKPONFEESGYTFTAPRDYCNLDKI 660
QY 661 SDNTEFLNFEIDRKTNNPSCNADLINRVLLDAGFTNELVQYWSKQKNIKGVKAR 720
Db 661 SDNTEFLNFEIDRKTNNPSCNADLINRVLLDAGFTNELVQYWSKQKNIKGVKAR 720
QY 721 FVTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGIGKIDVNSIENFTKTSIRDPACAGPVCDCRNSDVNDVCI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGIGKIDVNSIENFTKTSIRDPACAGPVCDCRNSDVNDVCI 840
QY 841 LDDGGFLMANHDDYTNOIGREFGEIDPSLMRHLVNIYAFNKSVDYOSVCEPAGAPKQ 900
Db 841 LDDGGFLMANHDDYTNOIGREFGEIDPSLMRHLVNIYAFNKSVDYOSVCEPAGAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAAWSILQOFLSLTPRLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAAWSILQOFLSLTPRLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEOTQYFFDNDKSFSGVLDCGNCRSIFHGEKLMNTLFIWVESKGTCPDTRL 1018
Db 961 SCITEOTQYFFDNDKSFSGVLDCGNCRSIFHGEKLMNTLFIWVESKGTCPDTRL 1018
QY 954 SCITEOTQYFFDNDKSFSGVLDCGNCRSIFHGEKLMNTLFIWVESKGTCPDTRL 1011
Db 954 SCITEOTQYFFDNDKSFSGVLDCGNCRSIFHGEKLMNTLFIWVESKGTCPDTRL 1011
RESULT 10
US-08-223-305C-56
Sequence 56, Application US/08223305C
Patent No. 5851824
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/223,305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US99/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
LENGTH: 1084 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-56

Query Match 98.98; Score 5289.5; DB 2; Length 1084;
Best Local Similarity 99.28; Pred. No. 0;
Matches 1010; Conservative 0; Mismatches 1; Indels 7; Gaps 1;
Qy 1-MAAGCLLALTITLQSLIGSSPEPPSATVTKSWDKMOEDLVTLAKTAGVNLVDI 60
Db 1-MAAGCLLALTITLQSLIGSSPEPPSATVTKSWDKMOEDLVTLAKTAGVNLVDI 60
Qy 61-YEKYQDLTYVEPNNAQLVEIATAARDIEKLLNSRKALVSLALEAEKVOAAHOWREDPASN 120
Db 61-YEKYQDLTYVEPNNAQLVEIATAARDIEKLLNSRKALVSLALEAEKVOAAHOWREDPASN 120
Qy 121-EVYYNNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROIYSQHAHVHIPTDIYEGSTIVL 180
Db 121-EVYYNNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROIYSQHAHVHIPTDIYEGSTIVL 180
Qy 181-NELNWTSALEDFVFKKREDEPSLLQVFGSATGLARYYPASPMVDNSRTPNKIDLYDVR 240
Db 181-NELNWTSALEDFVFKKREDEPSLLQVFGSATGLARYYPASPMVDNSRTPNKIDLYDVR 240
Qy 241-RPWYTGAAAPKMDLILVDVSGVSGLTFLKIRTSVSEMLETLDDDDFVNVSFNSNAQD 300
Db 241-RPWYTGAAAPKMDLILVDVSGVSGLTFLKIRTSVSEMLETLDDDDFVNVSFNSNAQD 300
Qy 301-VSCFOHLVQANVRNKKVYLKDAVNITAGITDYKKGFSFAEQLLNVSFNSNAQD 360
Db 301-VSCFOHLVQANVRNKKVYLKDAVNITAGITDYKKGFSFAEQLLNVSFNSNAQD 360
Qy 361-FTDGEERAQEIFNKNYKDKVRFVSVGQHNVERGPIQMACENKGYEIEPSIGAIR 420
Db 361-FTDGEERAQEIFNKNYKDKVRFVSVGQHNVERGPIQMACENKGYEIEPSIGAIR 420
Qy 421-INTQBYLDVLRPMVLAGKAKQVQWNTVYLDALGLVITGTLPVFNITGFQFNKTNLK 480
Db 421-INTQBYLDVLRPMVLAGKAKQVQWNTVYLDALGLVITGTLPVFNITGFQFNKTNLK 480
Qy 481-NQLILGVMGVDVSLIEDIKRLTPRTLCPNGYFFAIDPNGYVLLHNPQKPKSQEPVTL 540

Db 481-NQLILGVMGVDVSLIEDIKRLTPRTLCPNGYFFAIDPNGYVLLHNPQKPKSQEPVTL 540
Qy 541-DFLDAELENDIKVEIRNMKIDGESGKTRFLVKSQDERYIDKGNRTYTWTPVNGTDSL 600
Db 541-DFLDAELENDIKVEIRNMKIDGESGKTRFLVKSQDERYIDKGNRTYTWTPVNGTDSL 600
Qy 601-ALVLTYSFYIYKAKLEETITQARSKKGMKMDSETLKPDPNFEESGYTFIAPRDYCNLDKI 660
Db 601-ALVLTYSFYIYKAKLEETITQARY-----SETLKPDPNFEESGYTFIAPRDYCNLDKI 663
Qy 661-SDNTEFLLAFNEETIDKTPNNPCNADLINRVLLDAGFTNELVQNYWSKOKNKGKAR 720
Db 661-SDNTEFLLAFNEETIDKTPNNPCNADLINRVLLDAGFTNELVQNYWSKOKNKGKAR 713
Qy 721-FVVDGGITRVYPKEAGENWQENPETEDSFYKRSNDNDVFTAPYFNKSGPGAYESSGI 780
Db 721-FVVDGGITRVYPKEAGENWQENPETEDSFYKRSNDNDVFTAPYFNKSGPGAYESSGI 773
Qy 781-MVSKAVEIYIOGKLLKPAVVGIIKIDVNSWIENTFKTSIRDPACGVPDCCKRNSDVMDCVI 840
Db 781-MVSKAVEIYIOGKLLKPAVVGIIKIDVNSWIENTFKTSIRDPACGVPDCCKRNSDVMDCVI 833
Qy 841-LDDGSGFLLMANHDDYTNOIGRFFGEIDPISLMRHLVNSVYAFNKSIDYQSVCEPGAAPKQ 900
Db 841-LDDGSGFLLMANHDDYTNOIGRFFGEIDPISLMRHLVNSVYAFNKSIDYQSVCEPGAAPKQ 893
Qy 901-GAGHRSAYVPSVADILQIGWATAAANSILOQFLISLTFFPRLEAVEMEDDDFTASLSKQ 960
Db 901-GAGHRSAYVPSVADILQIGWATAAANSILOQFLISLTFFPRLEAVEMEDDDFTASLSKQ 953
Qy 961-SCITEQTYQFPDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVESKGTCPDTRL 1018
Db 961-SCITEQTYQFPDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVESKGTCPDTRL 1011

RESULT 11
US-08-455-543A-53
Sequence 53, Application US/08455543A
Patent No. 5792846
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206

;; FILING DATE: 15-AUG-1991
;; PRIOR APPLICATION DATA: US 07/620,250
;; FILING DATE: 30-NOV-1990
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/482,384
;; FILING DATE: 20-FEB-1990
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/603,751
;; FILING DATE: 04-APR-1989
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: WO PCT/US89/01408
;; FILING DATE: 04-APR-1989
;; APPLICATION DATA: US 07/176,899
;; FILING DATE: 04-APR-1988
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Seidman, Stephanie L.
;; REGISTRATION NUMBER: 33,779
;; REFERENCE/DOCKET NUMBER: 6362-52517
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (619)238-0999
;; TELEFAX: (619)238-0062
;; INFORMATION FOR SEQ ID NO: 53:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 1103 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; FRAGMENT TYPE: internal
US-08-455-543A-53

Query Match 98.6%; Score 5270; DB 1; Length 1103;

Best Local Similarity 97.4%; Pred. No. 0;
Matches 1010; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY 1 MAAGCLLALTLFSLGLGSEPPFSAVTKSVWDMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTLFSLGLGSEPPFSAVTKSVWDMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLTYVEPNNAQVLEIAARDIEKLLSNRSLVSLALEAEKVQAAHQWREDFASN 120
Db 61 YEKYQDLTYVEPNNAQVLEIAARDIEKLLSNRSLVSLALEAEKVQAAHQWREDFASN 120
QY 121 EVVYNAKDDLPENKNDSPGSGRIKPVFIEDANFGRIQISYQHAHVHIPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLPENKNDSPGSGRIKPVFIEDANFGRIQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTSLALDEVFKKNREDDPSLLQVFGSATGLARYYPASVPWVNSRTPNPKIDLYDVR 240
Db 181 NELNWTSLALDEVFKKNREDDPSLLQVFGSATGLARYYPASVPWVNSRTPNPKIDLYDVR 240
QY 241 RPYITOGAASPDMLILVDVSGVSLGLIKLRTSVSEMLETLSDDDDFVNVASFNSNAQD 300
Db 241 RPYITOGAASPDMLILVDVSGVSLGLIKLRTSVSEMLETLSDDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANRNKVKLADVANNITAKGIDYKGFSAFQOLLNINVSRANCKNIIML 360
Db 301 VSCFQHLVQANRNKVKLADVANNITAKGIDYKGFSAFQOLLNINVSRANCKNIIML 360
QY 361 FTDGGEERAQEIFNKYNKDKKVRFRFSGQHNRYERGPQIOMACENKGYIPIPSIGAIR 420
Db 361 FTDGGEERAQEIFNKYNKDKKVRFRFSGQHNRYERGPQIOMACENKGYIPIPSIGAIR 420
QY 421 INTQYLDVILGSPWVLADKAKOVQWNTVYLDALGLGLVITGLPVFNITGQFENKTNLK 480
Db 421 INTQYLDVILGSPWVLADKAKOVQWNTVYLDALGLGLVITGLPVFNITGQFENKTNLK 480
QY 481 NQLILGVMGVDVSLIEDIKRLTPRFTLCPNGYYFAIDPNGYVLLHPNLOPK----- 530
Db 481 NQLILGVMGVDVSLIEDIKRLTPRFTLCPNGYYFAIDPNGYVLLHPNLOPKPIGVGIPTIN 540

QY 531 -----NPKSQBPVTLDFLDAELENIDKVEIRNKMIDGESGEKTFRTLVSQDERYI 581
Db 541 LRRRRENIQNPXSQBPVTLDFLDAELENIDKVEIRNKMIDGESGEKTFRTLVSQDERYI 600
QY 582 DKGNTYTWTPVNGTDYSLALVLPYTFYIYKAKLEETLQARSKGKMDSETLKPDPNF 641
Db 601 DKGNTYTWTPVNGTDYSLALVLPYTFYIYKAKLEETLQARSKGKMDSETLKPDPNF 653
QY 642 EESGYTFIAPROYCNDLKISDNNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTN 701
Db 654 EESGYTFIAPROYCNDLKISDNNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTN 713
QY 702 ELVQNTWSKQNIKGVKARFVTDGGITRVYPKEAGENWOENPETYEDSFYKRSNDNY 761
Db 714 ELVQNTWSKQNIKGVKARFVTDGGITRVYPKEAGENWOENPETYEDSFYKRSNDNY 773
QY 762 VFTAPYFNKSGPGAYESGIMVSKAVEIYQGLKLPVAVGVIKIDVNSWIENFTKSTRDP 821
Db 774 VFTAPYFNKSGPGAYESGIMVSKAVEIYQGLKLPVAVGVIKIDVNSWIENFTKSTRDP 833
QY 822 CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTQIGRFFGEIDPFLMRHLVNSIYVA 881
Db 834 CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTQIGRFFGEIDPFLMRHLVNSIYVA 893
QY 882 FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAANSILOQFLLSTFPR 941
Db 894 FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAANSILOQFLLSTFPR 953
QY 942 LLEAVEMEDDDFTASLSKOSCITEOTQYFFDNDKSFSGVLDGCGSRIFPHGKLMNTNL 1001
Db 954 LLEAVEMEDDDFTASLSKOSCITEOTQYFFDNDKSFSGVLDGCGSRIFPHGKLMNTNL 1013
QY 1002 IFIMVESKGTCPCDTRL 1018
Db 1014 IFIMVESKGTCPCDTRL 1030
RESULT 12
US-08-223-305C-53
; Sequence 53, Application US/082233305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 1103 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-53

Query Match 98.6% Score 5270; DB 2; Length 1103;
Best Local Similarity 97.4%; Pred. No. 0;
Matches 1010; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY	1	MAAGCLLALTLTFLQSLIGPSSPEPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
DB	1	MAAGCLLALTLTFLQSLIGPSSPEPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
QY	61	YEKQDLYTEPNARQIVETAARDIEKLISNRSKALVSLALEAEKVQAAHQWREDFASN	120
DB	61	YEKQDLYTEPNARQIVETAARDIEKLISNRSKALVSLALEAEKVQAAHQWREDFASN	120
QY	121	EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHPDIDYEGSTIVL	180
DB	121	EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHPDIDYEGSTIVL	180
QY	181	NELNWTALDEVFKKNEEDPSLLWQVFGSATGLARYYPASWPVDNSRTPNKIDLYDVR	240
DB	181	NELNWTALDEVFKKNEEDPSLLWQVFGSATGLARYYPASWPVDNSRTPNKIDLYDVR	240
QY	241	RPWYIQGAASPKDMLILVDVSGVSGSLTLKLRISVSEMLETSLDDDFVNVASFNSNAQD	300
DB	241	RPWYIQGAASPKDMLILVDVSGVSGSLTLKLRISVSEMLETSLDDDFVNVASFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVYLKDAVNNTAKGTDYKKGFSFAFEQLLNTNVSRANCNKIIML	360
DB	301	VSCFQHLVQANVRNKKVYLKDAVNNTAKGTDYKKGFSFAFEQLLNTNVSRANCNKIIML	360
QY	361	FTDGEERAQEIFNKNKKRVRFESVGOHNYERGIQWACENKGYEYIPIPSIGAIR	420
DB	361	FTDGEERAQEIFNKNKKRVRFESVGOHNYERGIQWACENKGYEYIPIPSIGAIR	420
QY	421	INTQEYLDVLRPMVLADGAKAQVQWNTVLDALGLVITGLPVNITQGFENKTNLK	480
DB	421	INTQEYLDVLRPMVLADGAKAQVQWNTVLDALGLVITGLPVNITQGFENKTNLK	480
QY	481	NQLILGVMGVDSLEDIKRLTPRETLCPNGYFAIDPNGVYLLHPNLQPK-----	530
DB	481	NQLILGVMGVDSLEDIKRLTPRETLCPNGYFAIDPNGVYLLHPNLQPKIGVIGIPTIN	540

RESULT 13

US-08-455-543A-55
Sequence 55, Application US/08455543A
Patent No. 5792846
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1079 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-55

Query Match 98.2%; Score 5250; DB 1; Length 1079;

Best Local Similarity 98.7%; Pred. No. 0;
Matches 1005; Conservative 0; Mismatches 1; Indels 12; Gaps 2;

QY 1 MAAGCLLALTLFSLGIPSEPPFPKSAVTKSWDKMQEDLVTLAKTAGVNLQVDI 60
DB 1 MAAGCLLALTLFSLGIPSEPPFPKSAVTKSWDKMQEDLVTLAKTAGVNLQVDI 60
QY 61 YEKYQDLTYVEPNNAQLVEIARDIEKLLSNRSLVSLALEAEKVAQAAHQWREDFASN 120
DB 61 YEKYQDLTYVEPNNAQLVEIARDIEKLLSNRSLVSLALEAEKVAQAAHQWREDFASN 120
QY 121 EVVYNAKDLDPEKNDSPEGSQRIKPVIEDANFGRIQSYQHAHVHIPTDIYEGSTIVL 180
DB 121 EVVYNAKDLDPEKNDSPEGSQRIKPVIEDANFGRIQSYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTSALEDEVFKKNREDDPSLLWQVGSATGLARYYPASFPWVDSNRTPNKLIDLYDVR 240
DB 181 NELNWTSALEDEVFKKNREDDPSLLWQVGSATGLARYYPASFPWVDSNRTPNKLIDLYDVR 240
QY 241 RPWYIQAASPKDMLILVDVSGVSLTLKLRISYSEMLETSDDDDFVNASFNNAQD 300
DB 241 RPWYIQAASPKDMLILVDVSGVSLTLKLRISYSEMLETSDDDDFVNASFNNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKDAVNNITAKGIDYKKGFSFAPFOLLNINVRANCNKIIML 360
DB 301 VSCFQHLVQANVRNKKVLKDAVNNITAKGIDYKKGFSFAPFOLLNINVRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKNYKDKVRFVSQHNRYERGPQIOWMACENKGYIYIPSTIGAIR 420
DB 361 FTDGGEERAQEIFNKNYKDKVRFVSQHNRYERGPQIOWMACENKGYIYIPSTIGAIR 420
QY 421 INTQEYLDVLRPMVLADKAKQVQWNTVYLDALGLVITGTLPVFNITGQFENKTNLK 480
DB 421 INTQEYLDVLRPMVLADKAKQVQWNTVYLDALGLVITGTLPVFNITGQFENKTNLK 480
QY 481 NQLILGVMGVDSLEDIKRLTPRFTLCPNGYYFAIDPNGYVLLHPNLQPKSQEPVTL 540
|||||

DB 481 NQLILGVMGVDSLEDIKRLTPRFTLCPNGYYFAIDPNGYVLLHPNLQPKSQEPVTL 535
QY 541 DFLDAELENIDKVEIRNKMGIDGESGKTRTLVKSDERYIDKGNRTYTWTPVNGDYSL 600
DB 536 DFLDAELENIDKVEIRNKMGIDGESGKTRTLVKSDERYIDKGNRTYTWTPVNGDYSL 595
QY 601 ALVLPITYSYIYKAKLEETITQARSKKGMKQSETLKPDPNFESGYTFTIAPRDYCNLKI 660
DB 596 ALVLPITYSYIYKAKLEETITQARY-----SETLKPDPNFESGYTFTIAPRDYCNLKI 648
QY 661 SDNTEFLNFEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYWSKQKNIKGVKAR 720
DB 649 SDNTEFLNFEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYWSKQKNIKGVKAR 708
QY 721 FVVTGGITRVYPKEAGENQENPETEYDFYKRSLDNDNYFTAPYFNKSGPGAYESGI 780
DB 709 FVVTGGITRVYPKEAGENQENPETEYDFYKRSLDNDNYFTAPYFNKSGPGAYESGI 768
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPACAGPVCDCRNSDMVDCVI 840
DB 769 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPACAGPVCDCRNSDMVDCVI 828
QY 841 LDDGGFLMANHDDYTNOIGRFEGETDPSLMRHLVNSVYAFNKSVDYQSVCEPGAAPKQ 900
DB 829 LDDGGFLMANHDDYTNOIGRFEGETDPSLMRHLVNSVYAFNKSVDYQSVCEPGAAPKQ 888
QY 901 GAGHSAYVPSVADILQIGWATAAAWSILOQFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
DB 889 GAGHSAYVPSVADILQIGWATAAAWSILOQFLLSLTPRLLLEAVEMEDDDFTASLSKQ 948
QY 961 SCITEQTYFFDNDSKSFSGVLDGCGNCSRIFFHGEKLMNTNLIPIVYESKGTCPDTRL 1018
DB 949 SCITEQTYFFDNDSKSFSGVLDGCGNCSRIFFHGEKLMNTNLIPIVYESKGTCPDTRL 1006

RESULT 14

US-08-223-305C-55
; Sequence 55, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
LENGTH: 1079 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-55

Query Match 98.2%; Score 5250; DB 2; Length 1079;
Best Local Similarity 98.7%; Pred. No. 0;
Matches 1005; Conservative 0; Mismatches 1; Indels 12; Gaps 2;
QY 1 MAACCLALTLTQSLIGSSSEPPSAVTKSWDKMQEDLVTLAKTASGVNQLVDI 60
DB 1 MAACCLALTLTQSLIGSSSEPPSAVTKSWDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNARQVLAARDIEKLSNRKALVSLALEAEKVAQAHOWREDFASN 120
DB 61 YEKYQDLYTVEPNARQVLAARDIEKLSNRKALVSLALEAEKVAQAHOWREDFASN 120
QY 121 EVVYNKADLDPEKNSEPGSQRIKPVFIEDANFGRIQISYQHAHVHPTDIYEGSTIVL 180
DB 121 EVVYNKADLDPEKNSEPGSQRIKPVFIEDANFGRIQISYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNWTSLDVEFKKREEDPSLLQVFGSATGLARYYPASPWDNSRTNPKIDLYDVR 240
DB 181 NELNWTSLDVEFKKREEDPSLLQVFGSATGLARYYPASPWDNSRTNPKIDLYDVR 240
QY 241 RPWYIQAASPKDMLILVDVSGVSGLTCLKLIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
DB 241 RPWYIQAASPKDMLILVDVSGVSGLTCLKLIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQQLLNINVRANCKNIIML 360
DB 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSFAFQQLLNINVRANCKNIIML 360
QY 361 FTDGGEERAQEIFNKNKRVFRFVSGHNYERGPIONMACENKGYEYIPSGAIR 420
DB 361 FTDGGEERAQEIFNKNKRVFRFVSGHNYERGPIONMACENKGYEYIPSGAIR 420
QY 421 INTQEYLDVGRPMVLADGAKAQVQWNTNVLDALELGLVITGLTFVFNITQGFENKTNLK 480
DB 421 INTQEYLDVGRPMVLADGAKAQVQWNTNVLDALELGLVITGLTFVFNITQGFENKTNLK 480
QY 481 NQLILGVGVDSLEDIKRLTPRTLCNPGYIFADNPGYVLLHPNLPKNPKSQEPVTL 540
DB 481 NQLILGVGVDSLEDIKRLTPRTLCNPGYIFADNPGYVLLHPNLPKNPKSQEPVTL 540
QY 541 DFLDAELENIDKVEIRNKMIDGSEKTEFTLVKSQDERYIDKGNRTYTTPVNGTDYSL 600
DB 536 DFLDAELENIDKVEIRNKMIDGSEKTEFTLVKSQDERYIDKGNRTYTTPVNGTDYSL 595

RESULT 15
US-08-435-675B-5
Sequence 5, Application US/08435675B
Patent No. 5710250
GENERAL INFORMATION:
APPLICANT: Ellis, Steven Bradley
APPLICANT: Williams, Mark E.
APPLICANT: Harpold, Michael Miller
APPLICANT: Schwartz, Arnold
APPLICANT: Brenner, Robert
TITLE OF INVENTION: CALCIUM CHANNEL COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: CA
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/435,675B
FILING DATE: 05-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/314,083
FILING DATE: 28-SEP-1994
APPLICATION NUMBER: US 07/914,231
FILING DATE: 13-JUL-1992
APPLICATION NUMBER: US 07/603,751
FILING DATE: 08-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-53193
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-238-0999
TELEFAX: 619-238-0062
TELEX:

; INFORMATION FOR SEQ ID NO: 5:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1106 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FRAGMENT TYPE: Internal

; US-08-435-675B-5

Query Match

Best Local Similarity 96.1%; Score 5137.5; DB 1; Length 1106;

Matches 986; Conservative 13; Mismatches 12; Indels 29; Gaps 4;

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Search completed: June 8, 2001, 19:37:49
Job time: 31315 sec

OM of: US-09-397-548-15 to: Issued_Patents_NA:* out_format : pfs

Date: Jun 8, 2001 7:52 PM

About: Results were produced by the GenCore software, version 4.5,
Copyright (c) 1993-2000 Compugen Ltd.

Command line parameters:

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-DB=Issued_Patents_NA -OFMT=fastap -SUFFIX=rni -GAPOP=12.000
-GAPEXT=4.000 -MINMATCH=0.100 -LOOPCL=0.000 -LOOPEXT=0.000
-QGAPOP=4.500 -QGAPEXT=0.050 -XGAPOP=10.000 -XGAPEXT=0.500
-FGAPOP=6.000 -FGAPEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500
-DELOP=6.000 -DELEXT=7.000 -START=1 -MATRIX=blomsum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pfs
-NORM-ext -MINLEN=0 -MAXLEN=2000000000
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-WAIT -THREADS=1
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Search information block

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Query: US-09-397-548-15
Query length: 4916
Database: Issued_Patents_NA*
Database sequences: 307621
Database length: 87307344
Search time (sec): 184.840000
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; Patent No. (5429521)
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Feldman, Daniel
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fitch, Even, Tabin & Flannery
; STREET: 135 S. LaSalle
; CITY: Chicago
; STATE: Illinois
; COUNTRY: U.S.A.
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07745206A
; FILING DATE: 19910815
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Feder, Scott B
; REFERENCE/DOCKET NUMBER: 51504
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-372-7842
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3566 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..3273
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seq_documentation_block:
; Sequence 24, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Hallier & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311.363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3566 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..3273
; US-08-311-363-24
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; Sequence 11, Application US/08455543A

; Patent No. 5792846

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; TITLE OF INVENTION: METHODS

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

; CITY: San Diego

; STATE: California

; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSeq Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/455,543A

; FILING DATE: May 31, 1995

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/223,305

; FILING DATE: April 4, 1994

; PRIOR APPLICATION DATA:


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1  TITLE OF INVENTION:  METHODS
2  NUMBER OF SEQUENCES:  29
3  CORRESPONDENCE ADDRESS:
4  ADDRESSEE:  BROWN, MARTIN, HALLER & MCCLAIN
5  STREET:  1660 UNION STREET
6  CITY:  SAN DIEGO
7  STATE:  CA
8  COUNTRY:  USA
9  ZIP:  92101
10 COMPUTER READABLE FORM:
11 MEDIUM TYPE:  Floppy disk
12 COMPUTER:  IBM PC compatible
13 OPERATING SYSTEM:  PC-DOS/MS-DOS
14 SOFTWARE:  Patentin Release #1.0, Version #1.25
15 CURRENT APPLICATION DATA:
16 APPLICATION NUMBER:  US/08/193,078B
17 FILING DATE:  07-FEB-1994
18 CLASSIFICATION:  435
19 PRIOR APPLICATION DATA:
20 APPLICATION NUMBER:  US 07/868,354
21 FILING DATE:  10-APR-1992
22 PRIOR APPLICATION DATA:
23 APPLICATION NUMBER:  US 07/745,206
24 FILING DATE:  15-AUG-1991
25 ATTORNEY/AGENT INFORMATION:
26 NAME:  Seidman, Stephanie L.
27 REGISTRATION NUMBER:  33,779
28 REFERENCE/DOCKET NUMBER:  6362-53607
29 TELECOMMUNICATION INFORMATION:
30 TELEPHONE:  619-238-0999
31 TELEFAX:  619-238-0062
32 INFORMATION FOR SEQ ID NO:  11:
33 SEQUENCE CHARACTERISTICS:
34 LENGTH:  3600 base pairs
35 TYPE:  nucleic acid
36 STRANDEDNESS:  double
37 TOPOLOGY:  linear
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; Patent No. 5846757
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; GENERAL INFORMATION:
;   APPLICANT: Harpold, Michael
;   APPLICANT: Ellis, Steven
;   APPLICANT: Williams, Mark
;   APPLICANT: Feldman, Daniel
;   APPLICANT: McCue, Ann
;   APPLICANT: Brenner, Robert
;
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

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: Patent No. 5851824
: GENERAL INFORMATION:
: APPLICANT: Harpold, Michael
: APPLICANT: Ellis, Steven
: APPLICANT: Williams, Mark
: APPLICANT: Feldman, Daniel
: APPLICANT: McCue, Ann
: APPLICANT: Brenner, Robert
: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
: TITLE OF INVENTION: METHODS
: NUMBER OF SEQUENCES: 57
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Brown, Martin, Haller & McClain
: STREET: 1660 Union Street
: CITY: San Diego
: STATE: California
: COUNTRY: USA
: ZIP: 92101-2926
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette
: COMPUTER: IBM Compatible
: OPERATING SYSTEM: DOS
: SOFTWARE: FastSeq Version 1.5
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/223.305C
: FILING DATE: April 4, 1994
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 07/868,354
: FILING DATE: April 10, 1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/745,206
: FILING DATE: 15-AUG-1991
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/620,250
: FILING DATE: 30-NOV-1990
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/482,384
: FILING DATE: 20-FEB-1990
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/603,751
: FILING DATE: 04-APR-1989
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: WO PCT/US89/01408
: FILING DATE: 04-APR-1989
: ATTORNEY/AGENT INFORMATION:
: NAME: Seidman, Stephanie L.
: REGISTRATION NUMBER: 33,779
: REFERENCE/DOCKET NUMBER: 52516 (P519739)
: TELECOMMUNICATION INFORMATION:
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/ TELEPHONE: (619)238-0999
/ TELEFAX: (619)238-0062
/ INFORMATION FOR SEQ ID NO: 11:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 3600 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 35..3310
/ OTHER INFORMATION: /standard_name= "Alpha-2"
/ FEATURE:
/ NAME/KEY: 5'UTR
/ LOCATION: 1..34
/ FEATURE:
/ NAME/KEY: 3'UTR
/ LOCATION: 3308..3600
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US-08-223-305C-11

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; Sequence 33, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert

;; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
;; TITLE OF INVENTION: METHODS
;; NUMBER OF SEQUENCES: 57
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Brown, Martin, Haller & McClain
;; STREET: 1660 Union Street
;; CITY: San Diego
;; STATE: California
;; COUNTRY: USA
;; ZIP: 92101-2926
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Diskette
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: DOS
;; SOFTWARE: FastSeq Version 1.5
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/223,305C
;; FILING DATE: April 4, 1994
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 07/868,354
;; FILING DATE: April 10, 1992
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/745,206
;; FILING DATE: 15-AUG-1991
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/620,250
;; FILING DATE: 30-NOV-1990
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/482,384
;; FILING DATE: 20-FEB-1990
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/603,751
;; FILING DATE: 04-APR-1989
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: WO PCT/US89/01408
;; FILING DATE: 04-APR-1989
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/176,899
;; FILING DATE: 04-APR-1988
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Seidman, Stephanie L.
;; REGISTRATION NUMBER: 33,779
;; REFERENCE/DOCKET NUMBER: 52516 (P519739)
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (619)238-0999
;; TELEFAX: (619)238-0062
;; INFORMATION FOR SEQ ID NO: 33:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 3600 base pairs
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;; STRANDEDNESS: double
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> APPLICATION NUMBER: US 07/868,354
> FILING DATE: 10-APR-1992
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> APPLICATION NUMBER: US 07/745,206
> FILING DATE: 15-AUG-1991
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> APPLICATION NUMBER: US 07/620,250
> FILING DATE: 30-NOV-1990
> PRIOR APPLICATION DATA:
> APPLICATION NUMBER: US 07/482,384
> FILING DATE: 20-FEB-1990
> PRIOR APPLICATION DATA:
> APPLICATION NUMBER: US 07/603,751
> FILING DATE: 04-APR-1989
> PRIOR APPLICATION DATA:
> APPLICATION NUMBER: WO PCT/US89/01408
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> APPLICATION NUMBER: US 07/176,899
> FILING DATE: 04-APR-1988
> ATTORNEY/AGENT INFORMATION:
> NAME: Seidman, Stephanie L.
> REGISTRATION NUMBER: 33,779
> REFERENCE/POCKET NUMBER: 6362-55038
> TELECOMMUNICATION INFORMATION:
> TELEPHONE: (619) 238-0999
> TELEFAX: (619) 238-0062
> INFORMATION FOR SEQ ID NO: 11:
> SEQUENCE CHARACTERISTICS:
> LENGTH: 3600 base pairs
> TYPE: nucleic acid
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; Patent No. 6090623
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
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; FILING DATE:
; CLASSIFICATION:
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; APPLICATION NUMBER: US/08/290,012
; FILING DATE: 11-AUG-1994
; APPLICATION NUMBER: 08/149,097
; FILING DATE: 5-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/105,536
; FILING DATE: 11-AUG-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 519808
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 238-0999
; TELEFAX: (619) 238-0062
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3600 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Alison
; APPLICANT: Feldman, Daniel
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US/08/450,562
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/404,950
FILING DATE: 13-MAR-1995
APPLICATION NUMBER: 08/336,257
FILING DATE: 7-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/314,083
FILING DATE: 28-SEPT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/311,363
FILING DATE: 23-SEPT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/290,012
FILING DATE: 11-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: 4-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/193,078
FILING DATE: 07-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/149,097
FILING DATE: 5-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/105,536
FILING DATE: 11-AUG-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/914,231
FILING DATE: 13-JULY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: 10-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/06903
FILING DATE: 14-AUG-1992
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APPLICATION NUMBER: 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/603,751
FILING DATE: 08-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/482,384
FILING DATE: 02-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-519812
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 238-0999
TELEFAX: (619) 238-0062
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 3600 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 35..3310

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; Patent No. 604036
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3298 base pairs
; TYPE: nucleic acid
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; Sequence 3, Application US/09452007
; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL

TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: USA
ZIP: 02173-4799
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/452.007
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/713,118
FILING DATE: 16-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Mata, Elizabeth W.
REGISTRATION NUMBER: 38,236
REFERENCE/DOCKET NUMBER: ACC96-01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6240
TELEFAX: 617-861-9540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 3298 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 20..3292
US-09-452-007-3

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Quality: 5342.00 Length: 1018
Ratio: 5.248 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 99.902
alignment_block:
US-09-397-548-15 x US-09-452-007-3
Align seg 1/1 to: US-09-452-007-3 from: 1 to: 3298

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seq_documentation_block:
; Sequence 20, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3657 base pairs
; TYPE: nucleic acid
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; TOPOLOGY: linear
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; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann

APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette.
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/223,305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 20:
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TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE:
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FEATURE:
NAME/KEY: Coding Sequence
LOCATION: 35...3364
OTHER INFORMATION: Standard name "alpha2"
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US-08-223-305C-20

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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455.543A
; FILING DATE: May 31, 1995
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; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
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; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408.
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0052
; INFORMATION FOR SEQ ID NO: 34:
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 151 GluAspAlaAsnPheGlyArgGlnIleSerTyrGlnHisAlaAlaValHi 167
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 167 sIleProThrAspIleTyrGluGlySerThrIleValLeuAsnGluLeu 184
 535 TATTCCTACTGACATCTATGAGGGCTCAACAATGTGTTAAATGAAC 584
 184 snTrpThrSerAlaLeuAspGluValPheLysLysAsnArgGluGluAsp 200
 585 ACTGGACAAGTCCCTTAGTAGAAGTTTTCAAAAAGAAATCGCGAGGAAG 634
 201 ProSerLeuLeuTrpGlnValPheGlySerAlaThrGlyLeuAlaArgTy 217
 635 CTTCTAATATTGGCAGGTTTTTGGCAGTGCACCTGGCCTAGCTCGATA 684
 217 rTyrProAlaSerProTrpValAspAsnSerArgThrProAsnLysIleA 234
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917 nIleGlyTyrTrpAlaThrAlaAlaAlaTrpSerIleLeuGlnGlnPheL 934
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OM protein - protein search, using sw model

Run on: June 8, 2001, 19:38:04 ; Search time 63.61 Seconds
(without alignments)
321.037 Million cell updates/sec

Title: US-09-397-548-17
Perfect score: 5599
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Gapop 10.0 , Gapext 0.5

Searched: 185757 seqs, 19210857 residues

Total number of hits satisfying chosen parameters: 185757

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	5599	100.0	1091	1 US-07-745-206A-25	Sequence 25, Appl
2	5599	100.0	1091	1 US-08-455-543A-52	Sequence 52, Appl
3	5599	100.0	1091	2 US-08-223-305C-52	Sequence 52, Appl
4	5599	100.0	1091	2 US-08-311-363-25	Sequence 25, Appl
5	5595	99.9	1091	3 US-08-713-118-4	Sequence 4, Appl
6	5595	99.9	1091	4 US-09-452-007-4	Sequence 4, Appl
7	5559.5	99.3	1086	1 US-08-455-543A-54	Sequence 54, Appl
8	5559.5	99.3	1086	2 US-08-223-305C-54	Sequence 54, Appl
9	5542.5	99.0	1084	1 US-08-455-543A-56	Sequence 56, Appl
10	5542.5	99.0	1084	2 US-08-223-305C-56	Sequence 56, Appl
11	5523	98.6	1103	1 US-08-455-543A-53	Sequence 53, Appl
12	5523	98.6	1103	2 US-08-223-305C-53	Sequence 53, Appl
13	5503	98.3	1079	1 US-08-455-543A-55	Sequence 55, Appl
14	5503	98.3	1079	2 US-08-223-305C-55	Sequence 55, Appl
15	5385.5	96.2	1106	1 US-08-435-675B-5	Sequence 5, Appl
16	5367.5	95.9	1106	1 US-08-336-257A-8	Sequence 8, Appl
17	5134.5	91.7	1086	6 5386025-8	Patent No. 5386025
18	2581.5	46.1	508	1 US-08-435-675B-6	Sequence 6, Appl
19	182	3.3	885	3 US-09-074-579-5	Sequence 5, Appl
20	159.5	2.8	946	3 US-09-074-579-3	Sequence 3, Appl
21	154	2.8	903	1 US-08-021-601-12	Sequence 12, Appl
22	154	2.8	903	1 US-08-082-849B-12	Sequence 12, Appl
23	154	2.8	903	5 PCT-US94-01634-12	Sequence 12, Appl
24	152.5	2.7	789	1 US-08-471-043-32	Sequence 32, Appl
25	152.5	2.7	789	2 US-08-471-044-32	Sequence 32, Appl
26	152.5	2.7	789	2 US-08-463-483A-32	Sequence 32, Appl
27	152.5	2.7	789	2 US-08-471-046A-32	Sequence 32, Appl

28	152.5	2.7	789	2 US-08-470-566B-32	Sequence 32, Appl
29	152.5	2.7	789	2 US-08-838-219B-4	Sequence 4, Appl
30	152.5	2.7	789	2 US-08-469-334-32	Sequence 32, Appl
31	152.5	2.7	789	3 US-09-300-529-32	Sequence 32, Appl
32	152.5	2.7	789	3 US-09-233-336A-4	Sequence 4, Appl
33	152.5	2.7	789	4 US-09-233-752A-4	Sequence 4, Appl
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37	147.5	2.6	746	3 US-09-233-336A-6	Sequence 6, Appl
38	147.5	2.6	746	4 US-09-233-752A-6	Sequence 8, Appl
39	145.5	2.6	790	4 US-08-960-780-8	Sequence 8, Appl
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41	141.5	2.5	789	2 US-08-471-044-29	Sequence 29, Appl
42	141.5	2.5	789	2 US-08-463-483A-29	Sequence 29, Appl
43	141.5	2.5	789	2 US-08-471-046A-29	Sequence 29, Appl
44	141.5	2.5	789	2 US-08-470-566B-29	Sequence 29, Appl
45	141.5	2.5	789	2 US-08-838-219B-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-07-745-206A-25
; Sequence 25, Application US/07745206A
; Patent No. 5429921
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Feldman, Daniel
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fitch, Even, Tabin & Flannery
; STREET: 135 S. LaSalle
; CITY: Chicago
; STATE: Illinois
; COUNTRY: U.S.A.
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07745,206A
; FILING DATE: 19910815
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Feder, Scott B
; REFERENCE/DOCKET NUMBER: 51504
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-372-7842
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-745-206A-25

Query Match 100.0%; Score 5599; DB 1; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1063; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 181 NELNWTSALEVEFKKNEEDPSLLQWVFGSATGLARYYPASPWNDSRTPNKIDLYDVR 240
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DB 301 VSCFQHLVQANVRNKKVYKDAVNNITAKGTDYKKGFSFAFEQLLNVNVRANCNKIIML 360
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DB 361 FTDGGEERAQOEIENKYNKDKKRVFRFVSQGHNVYERGIQWACENKGYIYEIPSGAIR 420
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DB 421 INTQEYLDVLGRPNVLAGDKAKQVQWNTNVYLDALGLVITGLPVENITQGFENKTNLK 480
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DB 1021 QAEQTSQGNPCDMVKOPRYKRGDVCFDNNVLDYTDCCGVS 1063

RESULT 2

US-08-455-543A-52

; Sequence 52, Application US/08455543A

Patent No. 5792846
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
LENGTH: 1091 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-52

Query Match 100.0%; Score 5599; DB 1; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1063; Conservative 0; Mismatches 0; Indels 0; Caps 0;

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QY 181 NELNWTLSALDEVFKKRNREDPSLLNQVFGSATGLARYYPASFWVDNSRTPNKKIDLYDVR 240
DB 181 NELNWTLSALDEVFKKRNREDPSLLNQVFGSATGLARYYPASFWVDNSRTPNKKIDLYDVR 240
QY 241 RPWYTOGAASPKDMLILVDVSGVSGGLTKLRTSVSEMLETSLDDFVNFVASFNSNAQD 300
DB 241 RPWYTOGAASPKDMLILVDVSGVSGGLTKLRTSVSEMLETSLDDFVNFVASFNSNAQD 300
QY 301 VSCFQHLVOANVRNKKVLKDAVNNTAKGIDYKKGFSFAFEQLLNNVSRANCKNIIML 360
DB 301 VSCFQHLVOANVRNKKVLKDAVNNTAKGIDYKKGFSFAFEQLLNNVSRANCKNIIML 360
QY 361 FTDGGEERAQAEIFNKYNDKKVRFVRFSGQHNRYERGPIQWACENKGYIYEIPSIGAIR 420
DB 361 FTDGGEERAQAEIFNKYNDKKVRFVRFSGQHNRYERGPIQWACENKGYIYEIPSIGAIR 420
QY 421 INTQBYLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLVFNITGTFENKTNLK 480
DB 421 INTQBYLDVGRPMVLGDKAKOVQWNTVYLDALGLVITGTLVFNITGTFENKTNLK 480
QY 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYYFAIDPNGYVLLHNPQKPKSQEPVTL 540
DB 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYYFAIDPNGYVLLHNPQKPKSQEPVTL 540
QY 541 DFLDAELNDIKVEIRNKMIDGSEKFTRLVKQSDERYIDKGNRTYTTPVNGTDSL 600
DB 541 DFLDAELNDIKVEIRNKMIDGSEKFTRLVKQSDERYIDKGNRTYTTPVNGTDSL 600
QY 601 ALVLTYSFYIKAKLETTIQARSKKGMKDSLETKPDNFEESGYTFTAPRDYCNLDKI 660
DB 601 ALVLTYSFYIKAKLETTIQARSKKGMKDSLETKPDNFEESGYTFTAPRDYCNLDKI 660
QY 661 SDNTEFLNFEFIDRTPNPNPCNADLINRVLLDAGFTNELVQVNSKQKNIKGVKAR 720
DB 661 SDNTEFLNFEFIDRTPNPNPCNADLINRVLLDAGFTNELVQVNSKQKNIKGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
DB 721 FVYTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIQGLKLPVVGKIDVNSWIENTKTSTRDPCAGVPCCKRNSDVMDCVI 840
DB 781 MYSKAVEIYIQGLKLPVVGKIDVNSWIENTKTSTRDPCAGVPCCKRNSDVMDCVI 840
QY 841 LDGGFLMANHDDVTNIGRFFGIDPSLMRHLNYSVYAFNKSYSYQSVCEPGAAPKQ 900
DB 841 LDGGFLMANHDDVTNIGRFFGIDPSLMRHLNYSVYAFNKSYSYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASLLOQFLLSLFPRLLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAASLLOQFLLSLFPRLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITETQYFFDNDKSKFSGVLDCGNCGRIFHGEKLMNTNLFIMVESKGTCPDTRLLI 1020
DB 961 SCITETQYFFDNDKSKFSGVLDCGNCGRIFHGEKLMNTNLFIMVESKGTCPDTRLLI 1020
QY 1021 QAEQTSDEGNPCDMVKQPRYKGPVDCFDNNVLEDYTDGCGVS 1063
DB 1021 QAEQTSDEGNPCDMVKQPRYKGPVDCFDNNVLEDYTDGCGVS 1063

RESULT 3

US-08-223-305C-52
; Sequence 52, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-223-305C-52

Query Match 100.0%; Score 5599; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1063; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLFQSLIGSPSEPPFSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60
|||||

Db 1 MAAGCLLALTLTLFQSLIGPSSSEPPPSAVTIKSWVDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLNSRKSALVSLAEAEKVQAAHQRREDFASN 120
Db 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLNSRKSALVSLAEAEKVQAAHQRREDFASN 120
QY 121 EVVYNKADLDLPEKNDSEPGSQRIKPVFTEDANFGQISYQAAHVIPTDIYEGSTIVL 180
Db 121 EVVYNKADLDLPEKNDSEPGSQRIKPVFTEDANFGQISYQAAHVIPTDIYEGSTIVL 180
QY 181 NELNWTALDEVEFKKNEEDPSLLQVFGSATGLARYYPASPVWDNSRTNPKIDLYDVR 240
Db 181 NELNWTALDEVEFKKNEEDPSLLQVFGSATGLARYYPASPVWDNSRTNPKIDLYDVR 240
QY 241 RPWYIOGAASPDKMLILVDVSGVSGLTILRTSVSEMLETSLDDDFVNVASFNSNAQD 300
Db 241 RPWYIOGAASPDKMLILVDVSGVSGLTILRTSVSEMLETSLDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGITYDKKGFSAFQELLNVNVRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGITYDKKGFSAFQELLNVNVRANCNKIIML 360
QY 361 FTDCGERAEQIEFNKYNKDKKVRFRFVSGQHNYERGPIQMACENKGYIIEPSIGAIR 420
Db 361 FTDCGERAEQIEFNKYNKDKKVRFRFVSGQHNYERGPIQMACENKGYIIEPSIGAIR 420
QY 421 INTQEYLDVLRPMVLGAKAKOVQNTNVYLDALGLVITGTLPVFNITQGENKTNLK 480
Db 421 INTQEYLDVLRPMVLGAKAKOVQNTNVYLDALGLVITGTLPVFNITQGENKTNLK 480
QY 481 NQILGVMGVDVSLIEDIKRLTPFTLPCNGYIFAPDNGVYLLHPNLQPNKPSQEPVTL 540
Db 481 NQILGVMGVDVSLIEDIKRLTPFTLPCNGYIFAPDNGVYLLHPNLQPNKPSQEPVTL 540
QY 541 DFLDAELNDIKVEIRNKMIDGSGEKTFTLVKSODERYIDKGNRTYTTPVNGDYSL 600
Db 541 DFLDAELNDIKVEIRNKMIDGSGEKTFTLVKSODERYIDKGNRTYTTPVNGDYSL 600
QY 601 ALVLPYTSFYIIKAKLEETITQARSKGKMKDSETLKPDNFEESGYTFIAPRYCNDLKI 660
Db 601 ALVLPYTSFYIIKAKLEETITQARSKGKMKDSETLKPDNFEESGYTFIAPRYCNDLKI 660
QY 661 SDNTEFLNFEFIDRKTPNPNPSCNADLNRLVLLDAGFTNELVQVYWSKQKNIKGVKAR 720
Db 661 SDNTEFLNFEFIDRKTPNPNPSCNADLNRLVLLDAGFTNELVQVYWSKQKNIKGVKAR 720
QY 721 FVYTDGGITRYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
Db 721 FVYTDGGITRYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MVSKAVEIYIOGKLLPAPVVGIIKIDVNSWLENFTKTSIRDPGAPVCDCKRNSDVMDCVI 840
Db 781 MVSKAVEIYIOGKLLPAPVVGIIKIDVNSWLENFTKTSIRDPGAPVCDCKRNSDVMDCVI 840
QY 841 LDGGSFLMANHDDYTNQIGRFFGEIDPSLMRHLVNIYVAFNKSIDYOSVCEPAGAPKQ 900
Db 841 LDGGSFLMANHDDYTNQIGRFFGEIDPSLMRHLVNIYVAFNKSIDYOSVCEPAGAPKQ 900
QY 901 GAGHRSAYVPSVADIIQIGWATAAWSIIQQFLLSLTFPRLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHRSAYVPSVADIIQIGWATAAWSIIQQFLLSLTFPRLEAVEMEDDDFTASLSKQ 960
QY 961 SCTEOTOXFEFNDKSFSGVLDCGNCSTRIFHGEKLMNTNLIIFIMVESKGTCPCDTRLLI 1020
Db 961 SCTEOTOXFEFNDKSFSGVLDCGNCSTRIFHGEKLMNTNLIIFIMVESKGTCPCDTRLLI 1020
QY 1021 QAEQTSQGNPCDMVQPRYKRGPDVCFDNNVLEDYTDGCVS 1063
Db 1021 QAEQTSQGNPCDMVQPRYKRGPDVCFDNNVLEDYTDGCVS 1063

RESULT 4

US-08-311-363-25

; Sequence 25, Application: US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-311-363-25

Query Match 100.0%; Score 5599; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1063; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLLALTLTLFQSLIGPSSSEPPPSAVTIKSWVDKMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTLTLFQSLIGPSSSEPPPSAVTIKSWVDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLNSRKSALVSLAEAEKVQAAHQRREDFASN 120
Db 61 YEKYQDLYTVEPNNAQOLVEIAARDIEKLNSRKSALVSLAEAEKVQAAHQRREDFASN 120
QY 121 EVVYNKADLDLPEKNDSEPGSQRIKPVFTEDANFGQISYQAAHVIPTDIYEGSTIVL 180
Db 121 EVVYNKADLDLPEKNDSEPGSQRIKPVFTEDANFGQISYQAAHVIPTDIYEGSTIVL 180
QY 181 NELNWTALDEVEFKKNEEDPSLLQVFGSATGLARYYPASPVWDNSRTNPKIDLYDVR 240
Db 181 NELNWTALDEVEFKKNEEDPSLLQVFGSATGLARYYPASPVWDNSRTNPKIDLYDVR 240
QY 241 RPWYIOGAASPDKMLILVDVSGVSGLTILRTSVSEMLETSLDDDFVNVASFNSNAQD 300
Db 241 RPWYIOGAASPDKMLILVDVSGVSGLTILRTSVSEMLETSLDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGITYDKKGFSAFQELLNVNVRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGITYDKKGFSAFQELLNVNVRANCNKIIML 360

Db 721 FVTDGGITRVYPKEAGNENQENPETYEDSFYKRSLDNDNYFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGPVCDCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGPVCDCKRNSDVMDCVI 840
QY 841 LDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNYSVYAFNKSVDYQSVCEPGAAPKQ 900
Db 841 LDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNYSVYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSRFHGEKLMNTNLFIMVESKGTGCPDTRLLI 1020
Db 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSRFHGEKLMNTNLFIMVESKGTGCPDTRLLI 1020
QY 1021 QAEQTSDBGPNCDMWKQPRYKGPDPVCFDNNVLEDYTDGCGVYS 1063
Db 1021 QAEQTSDBGPNCDMWKQPRYKGPDPVCFDNNVLEDYTDGCGVYS 1063

RESULT 6

US-09-452-007-4
; Sequence 4, Application US/09452007
; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ju
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-452-007-4

Query Match 99.9%; Score 5595; DB 4; Length 1091;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1063; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MAAGCLLALTTLTFLSLLIGPSSEPPFPSSAVTIKSWVDKQEDLVTLAKTASGVNOLVDI 60
Db 1 MAAGCLLALTTLTFLSLLIGPSSEPPFPSSAVTIKSWVDKQEDLVTLAKTASGVNOLVDI 60
QY 61 YEKYQDLTYVEPNNAQRLVEIAARDIEKLLSNRSKALVSALAEAEKVQAAHOREDFASN 120
Db 61 YEKYQDLTYVEPNNAQRLVEIAARDIEKLLSNRSKALVSALAEAEKVQAAHOREDFASN 120
QY 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFQRIQSYQHAAVHIPTDIYEGSTIVL 180
Db 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFQRIQSYQHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSSALDEYFKKREEDPSLLMQVFGSATGLARYYPASPWVDSNRTPNKIDLYDVR 240
Db 181 NELNWTSSALDEYFKKREEDPSLLMQVFGSATGLARYYPASPWVDSNRTPNKIDLYDVR 240
QY 241 RPWYTOGAASPKDMLILVDVSGVSGSLTKLRTSYSEMLETLSDDDFYNVASFNSNAQD 300
Db 241 RPWYTOGAASPKDMLILVDVSGVSGSLTKLRTSYSEMLETLSDDDFYNVASFNSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNYSRANCNKIIML 360
Db 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNYSRANCNKIIML 360
QY 361 FTDGGEERAQEIFNKYKDKVRFVRSVQGHYERGPQIOWMACENKGYEYIPIPSIGAIR 420
Db 361 FTDGGEERAQEIFNKYKDKVRFVRSVQGHYERGPQIOWMACENKGYEYIPIPSIGAIR 420
QY 421 INTQEYLDVLGRPMVLGAKAKOVQNTVYLDALGLVITGTLPVFNITGOFENKTNLK 480
Db 421 INTQEYLDVLGRPMVLGAKAKOVQNTVYLDALGLVITGTLPVFNITGOFENKTNLK 480
QY 481 NQILIGVMGVDSLEIDKRLTPRFLCPNGYFAIDPNGYVLLHPNLQPKNSQBPVTL 540
Db 481 NQILIGVMGVDSLEIDKRLTPRFLCPNGYFAIDPNGYVLLHPNLQPKNSQBPVTL 540
QY 541 DFLDAELENDIKVEIRNKMIDGESGEKTPRLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENDIKVEIRNKMIDGESGEKTPRLVKOSODERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYTFYIYKAKLEETITQARSKKGKMDSETLKPDPNFESGYTFTAPRDYCNLDLKI 660
Db 601 ALVLPYTFYIYKAKLEETITQARSKKGKMDSETLKPDPNFESGYTFTAPRDYCNLDLKI 660
QY 661 SDNTEFLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQVWSKQKNIKGVKAR 720
Db 661 SDNTEFLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQVWSKQKNIKGVKAR 720
QY 721 FVTDGGITRVYPKEAGNENQENPETYEDSFYKRSLDNDNYFTAPYFNKSGPGAYESGI 780
Db 721 FVTDGGITRVYPKEAGNENQENPETYEDSFYKRSLDNDNYFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGPVCDCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPKAGPVCDCKRNSDVMDCVI 840
QY 841 LDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNYSVYAFNKSVDYQSVCEPGAAPKQ 900
Db 841 LDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNYSVYAFNKSVDYQSVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSRFHGEKLMNTNLFIMVESKGTGCPDTRLLI 1020
Db 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSRFHGEKLMNTNLFIMVESKGTGCPDTRLLI 1020
QY 1021 QAEQTSDBGPNCDMWKQPRYKGPDPVCFDNNVLEDYTDGCGVYS 1063
Db 1021 QAEQTSDBGPNCDMWKQPRYKGPDPVCFDNNVLEDYTDGCGVYS 1063

RESULT 7
US-08-455-543A-54
; Sequence 54, Application US/0845543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1086 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-455-543A-54

Query Match 99.3%; Score 5559.5; DB 1: Length 1086;

Best Local Similarity 99.5%; Pred. No. 0;
Matches 1058; Conservative 0; Mismatches 0; Indels 5; Gaps 1;
QY 1 MAAGCLLALTTLTFLQSLTLPSPSEEPFSAVTIKSWDKMQEDLVLTAKTASGVNQLVDI 60
|||||
Db 1 MAAGCLLALTTLTFLQSLTLPSPSEEPFSAVTIKSWDKMQEDLVLTAKTASGVNQLVDI 60
|||||
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHOREDFASN 120
|||||
Db 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVQAAHOREDFASN 120
|||||
QY 121 EYVYNAKDDLDPEKNDSEPGSORIKPVIEDANFRGQISYQHAHVHIPTDIYEGSTIVL 180
|||||
Db 121 EYVYNAKDDLDPEKNDSEPGSORIKPVIEDANFRGQISYQHAHVHIPTDIYEGSTIVL 180
|||||
QY 181 NELNWTSSALDEVFKKREEDPSLLWQVFGSATGLARYYPASPMVDNSRTPNKIDLDVDRR 240
|||||
Db 181 NELNWTSSALDEVFKKREEDPSLLWQVFGSATGLARYYPASPMVDNSRTPNKIDLDVDRR 240
|||||
QY 241 RPWYIQGAASPKDMLTLDVSGVSGLTCLKLINTSVSEMLETLDSDDDFYNVASFNSNAQD 300
|||||
Db 241 RPWYIQGAASPKDMLTLDVSGVSGLTCLKLINTSVSEMLETLDSDDDFYNVASFNSNAQD 300
|||||
QY 301 VSCFQHLVQANVRNKKVLDVANNITAKGIDYKKGFSAFQELLNYSRANCKIIML 360
|||||
Db 301 VSCFQHLVQANVRNKKVLDVANNITAKGIDYKKGFSAFQELLNYSRANCKIIML 360
|||||
QY 361 FTDGGEERAQEIFNKYKDKKVRFRFSVQGHYERGPQWMACENKGYIYEIPSGAIR 420
|||||
Db 361 FTDGGEERAQEIFNKYKDKKVRFRFSVQGHYERGPQWMACENKGYIYEIPSGAIR 420
|||||
QY 421 INTQEYLDVLRPMVLGAKQVQWTVNYLDALGLVITGTLVPVFNITGQFENKTNLK 480
|||||
Db 421 INTQEYLDVLRPMVLGAKQVQWTVNYLDALGLVITGTLVPVFNITGQFENKTNLK 480
|||||
QY 481 NQLILGVMGVDVSLIEDIKRLTFRFLCPNGYFAIDPNGYVLLHPLNLPKNKSPQPVTL 540
|||||
Db 481 NQLILGVMGVDVSLIEDIKRLTFRFLCPNGYFAIDPNGYVLLHPLNLPKNKSPQPVTL 540
|||||
QY 541 DFLDALENDIKVEIRNKMIDGESGKFTLTKVKSODERYIDKGNRTYTWTPVNGTDYSL 600
|||||
Db 536 DFLDALENDIKVEIRNKMIDGESGKFTLTKVKSODERYIDKGNRTYTWTPVNGTDYSL 595
|||||
QY 601 ALVLPYSFYIYKAKLEETITQARSKKGMKDSSETLKPDPNFESGYTFTIAPRDCYNDLKI 660
|||||
Db 596 ALVLPYSFYIYKAKLEETITQARSKKGMKDSSETLKPDPNFESGYTFTIAPRDCYNDLKI 655
|||||
QY 661 SDNTEFLNFEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQNYWSKQKNIKGVKAR 720
|||||
Db 656 SDNTEFLNFEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQNYWSKQKNIKGVKAR 715
|||||
QY 721 FVYTDGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
|||||
Db 716 FVYTDGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 775
|||||
QY 781 MYSKAVEIYIQGLKLPAYVGIKIDVNSWIENFTKTSIRDPCAGPYCDCKRNSDVNDVDCVI 840
|||||
Db 776 MYSKAVEIYIQGLKLPAYVGIKIDVNSWIENFTKTSIRDPCAGPYCDCKRNSDVNDVDCVI 835
|||||
QY 841 LDDGGFLLMANHDDYTNIQGRFFGEIDPSLMRHLNIVSVYAFNKSVDYOSVCPGPAKPK 900
|||||
Db 836 LDDGGFLLMANHDDYTNIQGRFFGEIDPSLMRHLNIVSVYAFNKSVDYOSVCPGPAKPK 895
|||||
QY 901 GAGHRSAYVPSVADILQIGMWATAAASLIQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 960
|||||
Db 896 GAGHRSAYVPSVADILQIGMWATAAASLIQOFLLSLTPRLLLEAVEMEDDDFTASLSKQ 955
|||||
QY 961 SCITEQTYFFDNDKSKFSVGLDCGNCRSIFHGEKLMNTNLIFIMVESKGTCPDCTRLLI 1020
|||||
Db 956 SCITEQTYFFDNDKSKFSVGLDCGNCRSIFHGEKLMNTNLIFIMVESKGTCPDCTRLLI 1015
|||||
QY 1021 QAEQTSQDGNPCDMVKQPRYKGPDPVCFNNVLEDTDCGGVS 1063
|||||

Db 1016 QAEQTS DGNPCDMVKQPRYRKGPDPVCFDNNVLEDTDCGGVS 1058

RESULT
US-08-223-305C-54
Sequence 54, Application US/08223305C
Patent No. 5851824
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/223,305C
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52516 (P519739)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGTH: 1086 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-223-305C-54

Query Match 99.3%; Score 5559.5; DB 2; Length 1086;
Best Local Similarity 99.5%; Pred. No. 0;

Matches 1058; Conservative 0; Mismatches 0; Indels 5; Gaps 1;
QY 1 MAACLLALTLTLFQSLIGPSSSEPPPSAVTIKSWDKQEDLVTLAKTAGVNLVDI 60
DB 1 MAACLLALTLTLFQSLIGPSSSEPPPSAVTIKSWDKQEDLVTLAKTAGVNLVDI 60
QY 61 YEKYODLYTVEPNNAQOLVEIAARDIEKLLSNRSKALVSLALEAEKQAAHQWREDFASN 120
DB 61 YEKYODLYTVEPNNAQOLVEIAARDIEKLLSNRSKALVSLALEAEKQAAHQWREDFASN 120
QY 121 EYVYNAKDDLDPKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
DB 121 EYVYNAKDDLDPKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNWTSALEDEVFKKREEDPSLLQVFGSATGLARYYPASPDVNSRTPNKIDLYDVR 240
DB 181 NELNWTSALEDEVFKKREEDPSLLQVFGSATGLARYYPASPDVNSRTPNKIDLYDVR 240
QY 241 RPWYIOGAASPKDMLILVDVSGVSGLTLLKIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
DB 241 RPWYIOGAASPKDMLILVDVSGVSGLTLLKIRTSVSEMLETLSDDDFVNVASFNSNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFEQLLNTNVRANCKIIML 360
DB 301 VSCFOHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFEQLLNTNVRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYNKDKKRVFRFSVGOHNYERGIOWMACENGYIYEIPISGAIR 420
DB 361 FTDGGEERAQEIFNKYNKDKKRVFRFSVGOHNYERGIOWMACENGYIYEIPISGAIR 420
QY 421 INTQEYLDVLGRPMVLADGAKQVQWNTNVLDALEGLVITGLTPVFNITGQFENKTNLK 480
DB 421 INTQEYLDVLGRPMVLADGAKQVQWNTNVLDALEGLVITGLTPVFNITGQFENKTNLK 480
QY 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYIFAIDNGVLLHPNLPKPKSQEPVTL 540
DB 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYIFAIDNGVLLHPNLPKPKSQEPVTL 540
QY 541 DFLDAELENDIKVEIRNKMIDGESGKTFRTLVKSQDERYIDKGNRTYTTWTPVNGTDYSL 600
DB 541 DFLDAELENDIKVEIRNKMIDGESGKTFRTLVKSQDERYIDKGNRTYTTWTPVNGTDYSL 600
QY 595 FVYTDGGITRVYPKEAGENWQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGFGAYESGI 775
DB 595 FVYTDGGITRVYPKEAGENWQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGFGAYESGI 775
QY 781 MYSKAVEIYIOGKLLPAPVVGIIKIDVNSWIENFTKTSIRPOCAGPVCDCRNSDVMDCVI 840
DB 781 MYSKAVEIYIOGKLLPAPVVGIIKIDVNSWIENFTKTSIRPOCAGPVCDCRNSDVMDCVI 840
QY 835 MYSKAVEIYIOGKLLPAPVVGIIKIDVNSWIENFTKTSIRPOCAGPVCDCRNSDVMDCVI 835
DB 835 MYSKAVEIYIOGKLLPAPVVGIIKIDVNSWIENFTKTSIRPOCAGPVCDCRNSDVMDCVI 835
QY 900 LDDGGLLMAHDDYTNQIGRFFGEIDPSLMRHLVNTSVYAFNKSVDYQSVCPGPAAPKQ 900
DB 900 LDDGGLLMAHDDYTNQIGRFFGEIDPSLMRHLVNTSVYAFNKSVDYQSVCPGPAAPKQ 900
QY 895 LDDGGLLMAHDDYTNQIGRFFGEIDPSLMRHLVNTSVYAFNKSVDYQSVCPGPAAPKQ 895
DB 895 LDDGGLLMAHDDYTNQIGRFFGEIDPSLMRHLVNTSVYAFNKSVDYQSVCPGPAAPKQ 895
QY 901 GAGHRSAYVPSVADILQIGWATAAAWSILQQLLSTFPRLLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHRSAYVPSVADILQIGWATAAAWSILQQLLSTFPRLLEAVEMEDDDFTASLSKQ 960
QY 955 GAGHRSAYVPSVADILQIGWATAAAWSILQQLLSTFPRLLEAVEMEDDDFTASLSKQ 955
DB 955 GAGHRSAYVPSVADILQIGWATAAAWSILQQLLSTFPRLLEAVEMEDDDFTASLSKQ 955
QY 1020 SCITEQTYFFDNDKSKFSGLDCGNCRIHFHGEKLMNTNLIIFIMVESKTCCTCDTRLLI 1020
DB 1020 SCITEQTYFFDNDKSKFSGLDCGNCRIHFHGEKLMNTNLIIFIMVESKTCCTCDTRLLI 1020
QY 1015 QAEQTS DGNPCDMVKQPRYRKGPDPVCFDNNVLEDTDCGGVS 1063
DB 1015 QAEQTS DGNPCDMVKQPRYRKGPDPVCFDNNVLEDTDCGGVS 1058

RESULT 9
 US-08-455-543A-56
 ; Sequence 56, Application US/08455543A
 ; Patent No. 5792846
 ; GENERAL INFORMATION:
 ; APPLICANT: Harpold, Michael
 ; APPLICANT: Ellis, Steven
 ; APPLICANT: Williams, Mark
 ; APPLICANT: Feldman, Daniel
 ; APPLICANT: McCue, Ann
 ; APPLICANT: Brenner, Robert
 ; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
 ; TITLE OF INVENTION: METHODS
 ; NUMBER OF SEQUENCES: 57
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Brown, Martin, Haller & McClain
 ; STREET: 1660 Union Street
 ; CITY: San Diego
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 92101-2926
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSeq Version 1.5
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/455,543A
 ; FILING DATE: May 31, 1995
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/223,305
 ; FILING DATE: April 4, 1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 07/868,354
 ; FILING DATE: April 10, 1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/745,206
 ; FILING DATE: 15-AUG-1991
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/620,250
 ; FILING DATE: 30-NOV-1990
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/482,384
 ; FILING DATE: 20-FEB-1990
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/603,751
 ; FILING DATE: 04-APR-1989
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: WO PCT/US89/01408
 ; FILING DATE: 04-APR-1989
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/176,899
 ; FILING DATE: 04-APR-1988
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Seidman, Stephanie L.
 ; REGISTRATION NUMBER: 33,779
 ; REFERENCE/DOCKET NUMBER: 6362-52517
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (619)238-0999
 ; TELEFAX: (619)238-0062
 ; INFORMATION FOR SEQ ID NO: 56:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1084 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; FRAGMENT TYPE: internal
 ; US-08-455-543A-56

Query Match 99.0%; Score 5542.5; DB 1; Length 1084;
 Best Local Similarity 99.2%; Pred. No. 0;
 Matches 1055; Conservative 0; Mismatches 1; Indels 7; Gaps 1;

QY	1	MAAGCLLALTTLTFLQSLLIGPSSSEPPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
DB	1	MAAGCLLALTTLTFLQSLLIGPSSSEPPPSAVTIKSWDKMQEDLVTLAKTASGVNQLVDI	60
QY	61	YEKYQDLYTVEPNNAARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHHQWREFASN	120
DB	61	YEKYQDLYTVEPNNAARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHHQWREFASN	120
QY	121	EVVYYNAKDDLDPEKNDSEPGSORIKPVPFIEDANFRQISYQHAHVHIPTDIYEGSTIVL	180
DB	121	EVVYYNAKDDLDPEKNDSEPGSORIKPVPFIEDANFRQISYQHAHVHIPTDIYEGSTIVL	180
QY	181	NELNWTLSALDEVFKKNREDDPSLWQVFGSATGLARYYPASPWVDNSRTNPKIDLYDVR	240
DB	181	NELNWTLSALDEVFKKNREDDPSLWQVFGSATGLARYYPASPWVDNSRTNPKIDLYDVR	240
QY	241	RPWYIQGAASPKDMLILVDVSGSVGLTLKLI RTSVSEMLETISDDDFVNVASFNSNAQD	300
DB	241	RPWYIQGAASPKDMLILVDVSGSVGLTLKLI RTSVSEMLETISDDDFVNVASFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSAFEQLLNYSRANCKNIIML	360
DB	301	VSCFQHLVQANVRNKKVLDKAVNNITAKGTDYKKGFSAFEQLLNYSRANCKNIIML	360
QY	361	FTDGGERAQEIFNKYNKKVFRFVSQGHYERGPIONMACENKGYIYEIPSTGAIR	420
DB	361	FTDGGERAQEIFNKYNKKVFRFVSQGHYERGPIONMACENKGYIYEIPSTGAIR	420
QY	421	INTQEYLDVLGRPMVLGDKAKOVQNTVYLDALGLVITGLPVFNITGQFENKTNLK	480
DB	421	INTQEYLDVLGRPMVLGDKAKOVQNTVYLDALGLVITGLPVFNITGQFENKTNLK	480
QY	481	NQLILGVMGVDVSLDILKRLTPRFTLCPNGYYFAIDPNGYVLLHPLNLPKNPKSQEPVTL	540
DB	481	NQLILGVMGVDVSLDILKRLTPRFTLCPNGYYFAIDPNGYVLLHPLNLPKNPKSQEPVTL	540
QY	541	DFLDAELNDIKVEIRNKMIDGESGKTRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL	600
DB	541	DFLDAELNDIKVEIRNKMIDGESGKTRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL	600
QY	601	ALVLPYTSFYIKAKLEETITQARSKKGMKQSETLKPDPNFESGYTFFIAPROYCNDLKI	660
DB	601	ALVLPYTSFYIKAKLEETITQARY -----SETLKPDPNFESGYTFFIAPROYCNDLKI	653
QY	661	SDNTEFLNFEFIDRKTNNPSCNADLINRVLLDAGFTNELVQVWSKQKNKGVKAR	720
DB	654	SDNTEFLNFEFIDRKTNNPSCNADLINRVLLDAGFTNELVQVWSKQKNKGVKAR	713
QY	721	FVYTDGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVTAPYFNKSGGAYESGI	780
DB	714	FVYTDGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVTAPYFNKSGGAYESGI	773
QY	781	MYSKAVEIYIQGLKAPVVGKIDVNSNIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI	840
DB	774	MYSKAVEIYIQGLKAPVVGKIDVNSNIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI	833
QY	841	LDDGGFLLMANHDDYTQIGRFFGEIDPDLMLRHLVNIYVAFNKSVDYQSVCEPQAPKQ	900
DB	834	LDDGGFLLMANHDDYTQIGRFFGEIDPDLMLRHLVNIYVAFNKSVDYQSVCEPQAPKQ	893
QY	901	GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTTPRLLAEVEMEDDDFTASLSKQ	960
DB	894	GAGHSAYVPSVADILQIGWATAAASWILQOFLLSLTTPRLLAEVEMEDDDFTASLSKQ	953
QY	961	SCITEQTYFFDNDSKSFSGVLDGCGNCSRFHGEKLMNTNLIIFIMVESKTCPCDRLLI	1020
DB	954	SCITEQTYFFDNDSKSFSGVLDGCGNCSRFHGEKLMNTNLIIFIMVESKTCPCDRLLI	1013
QY	1021	QAEQTSDBGPNPCDMVKQPRYRKGPDYCFDNNVLEDTDCGGVS	1063

Db 1014 QAEQSDGPNCDMVKQPRYKGPVCFDNNVLEDYDCGGVS 1056

RESULT 10
US-08-223-305C-56
; Sequence 56, Application us/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1084 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-223-305C-56

Query Match 99.0%; Score 5542.5; DB 2; Length 1084;

Best Local Similarity 99.2%; Pred. No. 0;
Matches 1055; Conservative 0; Mismatches 1; Indels 7; Gaps 1;

QY	1	MAAGCLLALTTLT	LFQSLIGPSSEPP	PSAVTIKSWDKMQED	LVTLAKTAGSVNOLVDI	60			
Db	1	MAAGCLLALTTLT	LFQSLIGPSSEPP <td>PSAVTIKSWDKMQED<td>LVTLAKTAGSVNOLVDI</td><td>60</td></td>	PSAVTIKSWDKMQED <td>LVTLAKTAGSVNOLVDI</td> <td>60</td>	LVTLAKTAGSVNOLVDI	60			
QY	61	YEKYODLYTVEPN	NARQLVEIAARDIE	KLNSRKALYSALAE	AEKVQAAHOREDFASN	120			
Db	61	YEKYODLYTVEPN	NARQLVEIAARDIE	KLNSRKALYSALAE	AEKVQAAHOREDFASN	120			
QY	121	EVVYNKADDLDP	PEKNDSEPGSQR	IKPVIEDANFGROI	SOHAAVHIPTDIYEGSTIVL	180			
Db	121	EVVYNKADDLDP	PEKNDSEPGSQR	IKPVIEDANFGROI	SOHAAVHIPTDIYEGSTIVL	180			
QY	181	NELNWT	SALDEVFKKREED	PSLLQVFGSATGL	ARYYPASPWDNSRTP	PNKIDLYDVR	240		
Db	181	NELNWT	SALDEVFKKREED	PSLLQVFGSATGL	ARYYPASPWDNSRTP	PNKIDLYDVR	240		
QY	241	RPWYIQGAASPK	DMLILVDVSGSV	GLTKLIRTSVSEML	ETLSDDDFVNVASFN	NAQD	300		
Db	241	RPWYIQGAASPK	DMLILVDVSGSV	GLTKLIRTSVSEML	ETLSDDDFVNVASFN	NAQD	300		
QY	301	VSCQHLVQANVR	NKVKYLKDAVN	NITAKGIDYKGF	SFAFEQLLNNVSR	ANCNIIML	360		
Db	301	VSCQHLVQANVR	NKVKYLKDAVN	NITAKGIDYKGF	SFAFEQLLNNVSR	ANCNIIML	360		
QY	361	FTDGEERAQEI	FNKYNKDKVR	FRFSVGOHNYER	GPIOMACENKGY	YIEISIGAIR	420		
Db	361	FTDGEERAQEI	FNKYNKDKVR	FRFSVGOHNYER	GPIOMACENKGY	YIEISIGAIR	420		
QY	421	INTOEYLDVLGR	PMVLAKAKOV	QWNTNVYLDAL	ELGLVITGTLPV	FNITQGFENKTLK	480		
Db	421	INTOEYLDVLGR	PMVLAKAKOV	QWNTNVYLDAL	ELGLVITGTLPV	FNITQGFENKTLK	480		
QY	481	NQLILGYMGVD	VSLEDIKRLTP	RTCPNGYFFAID	PNGYVLLHPN	LQPKPKSQEPVTL	540		
Db	481	NQLILGYMGVD	VSLEDIKRLTP	RTCPNGYFFAID	PNGYVLLHPN	LQPKPKSQEPVTL	540		
QY	541	DFLDAELENDI	KVEIRNMIDG	SEKTFRLVKSQ	BERYIDKGNRT	YTWTPVNGTDYSL	600		
Db	541	DFLDAELENDI	KVEIRNMIDG	SEKTFRLVKSQ	BERYIDKGNRT	YTWTPVNGTDYSL	600		
QY	601	ALVLPYSFYIK	AKLEETITQARY	-----SETL	KPDNFEESGYT	FIAPRDYCNDLKI	660		
Db	601	ALVLPYSFYIK	AKLEETITQARY	-----SETL	KPDNFEESGYT	FIAPRDYCNDLKI	660		
QY	661	SDNTEFLNFE	IDRKTNNPCN	ADLINRVLLDAG	FTNELVQNYWSK	OKNKGVKAR	720		
Db	661	SDNTEFLNFE	IDRKTNNPCN	ADLINRVLLDAG	FTNELVQNYWSK	OKNKGVKAR	720		
QY	721	FVYTDGGITRV	PKEAGENQEN	PETVEDSFYK	RSNDNVFTAP	VFNKSGPGAYESGI	780		
Db	721	FVYTDGGITRV	PKEAGENQEN	PETVEDSFYK	RSNDNVFTAP	VFNKSGPGAYESGI	780		
QY	781	MVSKAVEIYI	QGLKLLKPAV	VGIKIDVNSW	IENTFTKSIR	PDPCAGPVCDC	RNSDVMDCVI	840	
Db	781	MVSKAVEIYI	QGLKLLKPAV	VGIKIDVNSW	IENTFTKSIR	PDPCAGPVCDC	RNSDVMDCVI	840	
QY	841	LDGGLFLMAN	HDDYTNOIG	RFFGEIDPSL	MRHLVNTSV	AFNKSYYQSV	CEPGAAPKQ	900	
Db	841	LDGGLFLMAN	HDDYTNOIG	RFFGEIDPSL	MRHLVNTSV	AFNKSYYQSV	CEPGAAPKQ	900	
QY	901	GAGHRSAYV	PSVADILQIG	WATAAWSIL	QOFLLSLTF	PRLLAEVEMED	DDFTASLSKQ	960	
Db	901	GAGHRSAYV	PSVADILQIG	WATAAWSIL	QOFLLSLTF	PRLLAEVEMED	DDFTASLSKQ	960	
QY	961	SCITEQTYE	FFDNDKSK	SFSGVLDCG	NCSRIFHGEK	LNTNLIFIM	WESKGTCP	CDTRLI	1020
Db	961	SCITEQTYE	FFDNDKSK	SFSGVLDCG	NCSRIFHGEK	LNTNLIFIM	WESKGTCP	CDTRLI	1020
QY	1021	QAEQSDGPN	CDMVKQPRYK	GPVCFDNNV	LEDYDCGGVS	1063			

Db 1014 QAEQSDGPNCDMVKQPRYKKGPDVCFDNNVLEDYTDGGSV 1056

RESULT 11

US-08-455-543A-53
; Sequence 53, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 53:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1103 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-455-543A-53

Query Match 98.6%; Score 5523; DB 1; Length 1103;
Best Local Similarity 97.5%; Pred. No. 0;
Matches 1055; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY	1	MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVGNQLYDI	60
DB	1	MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWDKMQEDLVTLAKTAGVGNQLYDI	60
QY	61	YEKYQDLTYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHHQWRDFFASN	120
DB	61	YEKYQDLTYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAHHQWRDFFASN	120
QY	121	EVYYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGRQISYQHAHVHPTDIYEGSTIVL	180
DB	121	EVYYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGRQISYQHAHVHPTDIYEGSTIVL	180
QY	181	NELNWTSAIDVFKKNEEDPSLQVFGSATGLARYYPASFWVDNSRTPNKIDLYDVR	240
DB	181	NELNWTSAIDVFKKNEEDPSLQVFGSATGLARYYPASFWVDNSRTPNKIDLYDVR	240
QY	241	RPWYIOGAASPDKMLILVDVSGVSGTLKLIRTSVSEMLETSLDDDFVNFVAFNSNAQD	300
DB	241	RPWYIOGAASPDKMLILVDVSGVSGTLKLIRTSVSEMLETSLDDDFVNFVAFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVLDKAVNNITAKITDYKKGFSFAFEQLLNYNVRANCNKIIML	360
DB	301	VSCFQHLVQANVRNKKVLDKAVNNITAKITDYKKGFSFAFEQLLNYNVRANCNKIIML	360
QY	361	FTDGEERAQEIFNKYNKKKVRFRFVSGQHNHYERGIOWMACENKGYEYIPEISGIR	420
DB	361	FTDGEERAQEIFNKYNKKKVRFRFVSGQHNHYERGIOWMACENKGYEYIPEISGIR	420
QY	421	INTQEYLDVLGRPMVLADGKAKQVQWTVNYDLDAELGLVITGLTPVFNITQFENKTNL	480
DB	421	INTQEYLDVLGRPMVLADGKAKQVQWTVNYDLDAELGLVITGLTPVFNITQFENKTNL	480
QY	481	NQLILGVNGVDVSLIEDIKRLTPRTLCPNGYIFAIDPNGYVLLHPNLQPK-----	530
DB	481	NQLILGVNGVDVSLIEDIKRLTPRTLCPNGYIFAIDPNGYVLLHPNLQPK-----	530
QY	531	-----NPKSQEPVTLDFDAELENDIKVEIRNKKMIDGESGKPTFTLVKSODERYI	581
DB	541	LRKRRPNIQNPKSQEPVTLDFDAELENDIKVEIRNKKMIDGESGKPTFTLVKSODERYI	600
QY	582	DGNRTYTWTPVNGTDYSLALVLPYTFYIYKAKLEETITQARSKKGMKDSSETLKPNF	641
DB	601	DGNRTYTWTPVNGTDYSLALVLPYTFYIYKAKLEETITQARY-----SETLKPNF	653
QY	642	EESGYTFIAPRDYCNLDKISDNNTFELNFNEDIDRKTNNPNSCNADLINRVLLDAGFTN	701
DB	654	EESGYTFIAPRDYCNLDKISDNNTFELNFNEDIDRKTNNPNSCNADLINRVLLDAGFTN	713
QY	702	ELVQYNSKQKNIKGVKARFVVTGGITRVYPKEAGENWQENPETEYDSFYKRSLDNDNY	761
DB	714	ELVQYNSKQKNIKGVKARFVVTGGITRVYPKEAGENWQENPETEYDSFYKRSLDNDNY	773
QY	762	VFTAPYFNKSGPGAYESGIMVSKAVEIYIOGKLKPAVVGKIDVNSWIENFTKTSIRDP	821
DB	774	VFTAPYFNKSGPGAYESGIMVSKAVEIYIOGKLKPAVVGKIDVNSWIENFTKTSIRDP	833
QY	822	CAGPVCCKRNSDVMDCVILDDGGFLMANHDDVTNQIGRFFGEIDPSLMRHLNIVSYA	881
DB	834	CAGPVCCKRNSDVMDCVILDDGGFLMANHDDVTNQIGRFFGEIDPSLMRHLNIVSYA	893
QY	882	FNKSYDYOSVCEPGAAPKQAGHSAYVPSVADILQIGWATAAASILQOFLSLTTPR	941
DB	894	FNKSYDYOSVCEPGAAPKQAGHSAYVPSVADILQIGWATAAASILQOFLSLTTPR	953
QY	942	LLEAVEMEDDDFTASLSKQSCITEQTQYFFDNDSKFSFGLDCGNCRIFFHGEKLMNTNL	1001
DB	954	LLEAVEMEDDDFTASLSKQSCITEQTQYFFDNDSKFSFGLDCGNCRIFFHGEKLMNTNL	1013

QY 1002 IFINVESKGTCPDTRLLIOAEOQSDGNPCDMVKOPRYKKGSDVCFDNNVLEDTDCGG 1061
Db 1014 IFINVESKGTCPDTRLLIOAEOQSDGNPCDMVKOPRYKKGSDVCFDNNVLEDTDCGG 1073

QY 1062 VS 1063
Db 1074 VS 1075

RESULT 12

US-08-223-305C-53

; Sequence 53, Application US/08223305C

; Patent No. 5851824

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

; CITY: San Diego

; STATE: California

; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSEQ Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/223,305C

; FILING DATE: April 4, 1994

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 07/868,354

; FILING DATE: April 10, 1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/745,206

; FILING DATE: 15-AUG-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/620,250

; FILING DATE: 30-NOV-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/482,384

; FILING DATE: 20-FEB-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/603,751

; FILING DATE: 04-APR-1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: WO PCT/US89/01408

; FILING DATE: 04-APR-1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/176,899

; FILING DATE: 04-APR-1988

; ATTORNEY/AGENT INFORMATION:

; NAME: Seidman, Stephanie L.

; REGISTRATION NUMBER: 33,779

; REFERENCE/DOCKET NUMBER: 52516 (P519739)

; TELEPHONE: (619)238-0999

; TELEFAX: (619)238-0062

; INFORMATION FOR SEQ ID NO: 53:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1103 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FRAGMENT TYPE: Internal
US-08-223-305C-53

Query Match 98.6%; Score 5523; DB 2; Length 1103;
Best Local Similarity 97.5%; Pred. NO. 0;
Matches 1055; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY	1	MAAGCLIALTLTLFQSL	IGPSEEP	PPSAVTIK	SWDKMQED	LVTLAKT	ASGVNQLVDI	60																																						
Db	1	MAAGCLIALTLTLFQSL	IGPSEEP	PPSAVTIK	SWDKMQED	LVTLAKT	ASGVNQLVDI	60																																						
QY	61	YEXYQDLYTVEPNNARQ	LVIAARD	IEKLLSNR	SKALVSLA	LEAEK	VQAAHQWREDFASN	120																																						
Db	61	YEXYQDLYTVEPNNARQ	LVIAARD	IEKLLSNR	SKALVSLA	LEAEK	VQAAHQWREDFASN	120																																						
QY	121	EVVYNAKDDLDPEKND	SEPGSRIK	PFVEDAN	FGQISYQ	HAHVHIPTD	IVEGSTIVL	180																																						
Db	121	EVVYNAKDDLDPEKND	SEPGSRIK	PFVEDAN	FGQISYQ	HAHVHIPTD	IVEGSTIVL	180																																						
QY	181	NELNWT	SALDEVEFK	KNREEDPS	LLWVFGS	ATGLARY	PASPWPV	NSRTPNKIDLYDVR	240																																					
Db	181	NELNWT	SALDEVEFK	KNREEDPS	LLWVFGS	ATGLARY	PASPWPV	NSRTPNKIDLYDVR	240																																					
QY	241	RPWYIOGAASPKDML	ILVDVSG	SVSGLT	TLKIRTS	EMLETS	DDDDFVNVAS	FNSNAQD	300																																					
Db	241	RPWYIOGAASPKDML	ILVDVSG	SVSGLT	TLKIRTS	EMLETS	DDDDFVNVAS	FNSNAQD	300																																					
QY	301	VSCFOHLVQANVRN	KKVLD	AVANNIT	AKGITDY	KKGFS	FAFOLLN	VNSRANCNKIIML	360																																					
Db	301	VSCFOHLVQANVRN	KKVLD	AVANNIT	AKGITDY	KKGFS	FAFOLLN	VNSRANCNKIIML	360																																					
QY	361	FTDGEERAQEIEN	KYKNDK	KVRFVS	GVQHNY	ERGP	IQMACEN	KNGYIYEPSIGAIR	420																																					
Db	361	FTDGEERAQEIEN	KYKNDK	KVRFVS	GVQHNY	ERGP	IQMACEN	KNGYIYEPSIGAIR	420																																					
QY	421	INTQEYLDVLGR	PVNLAD	KAKOVQ	NTNVD	LALEGL	VTGTL	PVNTIQG	ENKTNLK	480																																				
Db	421	INTQEYLDVLGR	PVNLAD	KAKOVQ	NTNVD	LALEGL	VTGTL	PVNTIQG	ENKTNLK	480																																				
QY	481	NQLILGVMGVDV	SLEDIK	RLTPRT	LCPCNGY	YFPAID	PNGVYLL	HPNLOPK	-----	530																																				
Db	481	NQLILGVMGVDV	SLEDIK	RLTPRT	LCPCNGY	YFPAID	PNGVYLL	HPNLOPK	-----	530																																				
QY	531	-----	NPKSQEP	VTLD	FLDAE	LENDIK	VEIRN	KMIDGES	EKTFRTL	VKSQDERYI	581																																			
Db	541	LRKRRPN	IQNPKSQEP	VTLD	FLDAE	LENDIK	VEIRN	KMIDGES	EKTFRTL	VKSQDERYI	600																																			
QY	582	DKGNRTYT	TPVNGTDY	SLALV	PTYSFY	YIKAKLE	ETITQ	ARKSK	KKGMD	SETLKP	DNF	641																																		
Db	601	DKGNRTYT	TPVNGTDY	SLALV	PTYSFY	YIKAKLE	ETITQ	ARKSK	KKGMD	SETLKP	DNF	653																																		
QY	642	EESGYTFI	APRDYCN	DLKIS	DNNTF	ELLN	EFIDR	KTPN	PNPCN	ADLIN	RVL	DAGFTN	701																																	
Db	654	EESGYTFI	APRDYCN	DLKIS	DNNTF	ELLN	EFIDR	KTPN	PNPCN	ADLIN	RVL	DAGFTN	713																																	
QY	702	ELVQNTWS	KQKNIK	GVKAR	VFVTDG	GITRVY	PK	EAG	ENWO	ENPET	YEDS	YKRS	LDNDNY	761																																
Db	714	ELVQNTWS	KQKNIK	GVKAR	VFVTDG	GITRVY	PK	EAG	ENWO	ENPET	YEDS	YKRS	LDNDNY	773																																
QY	762	VFTAPY	FNKSG	PGAY	ESGIM	VSKAVE	YIQ	KLK	PAV	GIKID	VNS	WIEN	FNTK	STRDP	821																															
Db	774	VFTAPY	FNKSG	PGAY	ESGIM	VSKAVE	YIQ	KLK	PAV	GIKID	VNS	WIEN	FNTK	STRDP	833																															
QY	822	CAGP	VCDC	KRNS	DMDC	VIL	DG	GFLL	MAN	HDDYT	QIG	RFF	GEID	PS	LMRHL	VNIS	VYA	881																												
Db	834	CAGP	VCDC	KRNS	DMDC	VIL	DG	GFLL	MAN	HDDYT	QIG	RFF	GEID	PS	LMRHL	VNIS	VYA	893																												
QY	882	FNKSYD	YQSV	CEP	GAAP	KOG	AGH	RSAY	VPS	VADI	IQ	GW	WATA	AAWS	I	LOQ	FL	LS	TFPR	941																										
Db	894	FNKSYD	YQSV	CEP	GAAP	KOG	AGH	RSAY	VPS	VADI	IQ	GW	WATA	AAWS	I	LOQ	FL	LS	TFPR	953																										
QY	942	LL	EAV	EM	ED	DD	FT	AS	LS	KQ	SC	ITE	Q	Y	F	D	N	D	S	K	S	F	S	G	V	L	D	C	G	N	C	S	R	I	F	H	G	E	K	L	M	N	T	N	L	1001

Db 954 LLEAVEMEDDDFTASLSKSCITEQIYFFDNDKSFSGVLDGNCGRIFHGEKLMNTNL 1013
QY 1002 IFIWESKGTCPDTRLLIOAQTSDGPNPCDMVKQPRYKRGPDVCFDNNVLEDYDCGG 1061
Db 1014 IFIWESKGTCPDTRLLIOAQTSDGPNPCDMVKQPRYKRGPDVCFDNNVLEDYDCGG 1073
QY 1062 VS 1063
Db 1074 VS 1075

RESULT 13
US-08-455-543A-55
Sequence 55, Application US/08455543A
Patent No. 5792846
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 55:

SEQUENCE CHARACTERISTICS:
LENGTH: 1079 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-55

Query Match 98.3%; Score 5503; DB 1; Length 1079;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 1050; Conservative 0; Mismatches 1; Indels 12; Gaps 2;
QY 1 MAAGCLLALTTLFQSLIGPSSSEEPFPPSAVTIKSWYDKMQEDLVTLAKTASGVNQLVDI 60
Db 1 MAAGCLLALTTLFQSLIGPSSSEEPFPPSAVTIKSWYDKMQEDLVTLAKTASGVNQLVDI 60
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAAHOREDFASN 120
Db 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALVSLALEAEKVAQAAHOREDFASN 120
QY 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFTEDANFGROIYQHAHVHPTDIYEGSTIVL 180
Db 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFTEDANFGROIYQHAHVHPTDIYEGSTIVL 180
QY 181 NELNWTSSALDEVEFKKNREEDPSLLQWVFGSATGLARYYPASPMVDNSRTNPKIDLYDVR 240
Db 181 NELNWTSSALDEVEFKKNREEDPSLLQWVFGSATGLARYYPASPMVDNSRTNPKIDLYDVR 240
QY 241 RPYIQAASPKDMLILVDVSGVSLTLKLIITSVSEMLETISDDDDFVNVSFNSNAQD 300
Db 241 RPYIQAASPKDMLILVDVSGVSLTLKLIITSVSEMLETISDDDDFVNVSFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKDAVNNTAKGITDYKGFSPAFEOALLNYSRANCKIIML 360
Db 301 VSCFQHLVQANVRNKKVLKDAVNNTAKGITDYKGFSPAFEOALLNYSRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYKDKKVRFRFSVQGHNYERGPQIOMACENKGYIYEIPSGAIR 420
Db 361 FTDGGEERAQEIFNKYKDKKVRFRFSVQGHNYERGPQIOMACENKGYIYEIPSGAIR 420
QY 421 INTQEYLDVLRPWLAKGAKOVQNTNYLDALGLVITGTLPVFNITGQENKTNLK 480
Db 421 INTQEYLDVLRPWLAKGAKOVQNTNYLDALGLVITGTLPVFNITGQENKTNLK 480
QY 481 NQILIGVMGVDSLEDIKRLTPFTLCPCNGYFAIDPNGYVLLHPNLPKNKSOEPTVL 540
Db 481 NQILIGVMGVDSLEDIKRLTPFTLCPCNGYFAIDPNGYVLLHPNLPKNKSOEPTVL 540
QY 541 DFLDAELENKIKVEIRNKMIDGESGEKFTTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFLDAELENKIKVEIRNKMIDGESGEKFTTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
QY 601 ALVLPYTSFYIYKAKLEETITQARSKKGMKDSKSETLKPONFESGTYTAPRYCNDLKI 660
Db 601 ALVLPYTSFYIYKAKLEETITQARSKKGMKDSKSETLKPONFESGTYTAPRYCNDLKI 660
QY 661 SDNNTFLLNFNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQNVWSKQKNIKGVKAR 720
Db 661 SDNNTFLLNFNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQNVWSKQKNIKGVKAR 720
QY 721 FVYTDGGITRVYPKEAGENQENPETEYDFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
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QY 781 MYSKAVEIYIQGLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCRNSDVMDCVI 840
Db 781 MYSKAVEIYIQGLLKPAVVGKIDVNSWNIENFTKTSIRDPGAGPVCDCRNSDVMDCVI 840
QY 841 LDDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNIVSYAFNKSVDYOSVCEPQAPKQ 900
Db 841 LDDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNIVSYAFNKSVDYOSVCEPQAPKQ 900
QY 829 LDDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNIVSYAFNKSVDYOSVCEPQAPKQ 888
Db 829 LDDGGFLLMANHDDYTNOIGREFGEIDPSLMRHLNIVSYAFNKSVDYOSVCEPQAPKQ 888

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Job time: 31349 sec

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Date: Jun 8, 2001 7:58 PM

About: Results were produced by the GenCore software, version 4.5,
Copyright (c) 1993-2000 Compugen Ltd.

Command line parameters:

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-DB=Issued_Patents_NA -OPMT=fastap -SUFFIX=rni -GAPOP=12.000
-GAPEXT=4.000 -MINMATCH=0.100 -LOOPCL=0.000 -LOOPEXT=0.000
-OGAPEXT=4.500 -OGAPEXT=0.050 -XGAPOP=10.000 -XGAPEXT=0.500
-OGAPEXT=6.000 -FGAPEXT=7.000 -TGAPOP=10.000 -TGAPEXT=0.500
-DELOP=6.000 -DELEX=7.000 -START=1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pfs
-NORM=ext -MINLEN=0 -MAXLEN=2000000000
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-WAIT -THREADS=1
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Search information block:

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Query length: 1063
Database: Issued_Patents_NA.*
Database sequences: 302621
Database length: 87301344
Search time (sec): 184.840000
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score_list:

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; Sequence 24, Application US/07745206A
; Patent No. 5429921
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Feldman, Daniel
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fitch, Even, Tabin & Flannery
; STREET: 135 S. LaSalle
; CITY: Chicago
; STATE: Illinois
; COUNTRY: U.S.A.
; ZIP: 60603
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COMPUTER READABLE FORM:

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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/745,206A
; FILING DATE: 19910815
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CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Feder, Scott B

REFERENCE/DOCKET NUMBER: 51504

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312-372-7842

INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:

LENGTH: 3566 base pairs

TYPE: NUCLEIC ACID

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS

LOCATION: 1..3273

US-07-745-206A-24

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Quality: 5599.00 Length: 1063

Ratio: 5.267 Gaps: 0

Percent Similarity: 100.000 Percent Identity: 100.000

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; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3566 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
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; TOPOLOGY: unknown
 ; MOLECULE TYPE: DNA (genomic)
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 1...3273
 US-08-311-363-24

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; Patent No. 5792846

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

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; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; MEDIUM OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESS: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
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FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
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: Patent No. 5846757
: GENERAL INFORMATION:
: APPLICANT: Harpold, Michael
: APPLICANT: Ellis, Steven
: APPLICANT: Williams, Mark
: APPLICANT: Feldman, Daniel
: APPLICANT: McCue, Ann
: APPLICANT: Brenner, Robert
: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
: TITLE OF INVENTION: METHODS
: NUMBER OF SEQUENCES: 29
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: BROWN, MARTIN, HALLER & MCCLAIN
: STREET: 1660 UNION STREET
: CITY: SAN DIEGO
: STATE: CA
: COUNTRY: USA
: ZIP: 92101
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/193,078B
: FILING DATE: 07-FEB-1994
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/868,354
: FILING DATE: 10-APR-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/745,206
: FILING DATE: 15-AUG-1991
: ATTORNEY/AGENT INFORMATION:
: NAME: Seidman, Stephanie L.
: REGISTRATION NUMBER: 33,779
: REFERENCE/DOCKET NUMBER: 6362-53607
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 619-238-0999
: TELEFAX: 619-238-0062
: INFORMATION FOR SEQ ID NO: 11:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 3600 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
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; Sequence 11, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
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ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM COMPATIBLE

COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS

OPERATING SYSTEM: DOS
SOFTWARE: FastSEO Version 1.5

SOFTWARE: TASCSEQ VERSION 1.3
CURRENT APPLICATION DATA:

CURRENT AFFILIATION DATA:
 APPLICATION NUMBER: US 08 / 223 305C

APPLICATION NUMBER: US/08/223,303C
FILING DATE: April 4 1994

FILING DATE: April 4, 1994
 PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:
 IDENTIFICATION NUMBER: 02/050 354

APPLICATION NUMBER: 07/868,354
FILING DATE: 2004-10-10

FILING DATE: April 10, 1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/745,206

FILING DATE: 15-AUG-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/620,250

FILING DATE: 30-NOV-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/482,384

FILING DATE: 20-FEB-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/603,751

FILING DATE: 04-APR-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: WO PCT/US89/01

FILING DATE: 04-APR-1989

PRIOR APPLICATION DATA:

APPLCATION NUMBER: US 07/176 899

AFFIDAVIT NUMBER: 03 07/170,033
 FILING DATE: 04-APP-1988

FILED DATE: 04 APR 1988
ATTORNEY/AGENT INFORMATION:

ATTORNEY/AGENT INFORMATION:
NAME: Saidman Stenbanic I

NAME: SEIDMAN, STEPHANIE L.
REGISTRATION NUMBER: 33 770

REGISTRATION NUMBER: 33,179
REFERENCE/DOCKET NUMBER: 52516 / D

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TELECOMMUNICATION INFORMATION:
TELEPHONE: 610\328-0000

TELEPHONE: (619) 238-0999

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; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
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; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223.305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
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; APPLICATION NUMBER: US 07/745,206
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; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
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; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
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; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 33:
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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
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; FILING DATE: 11-AUG-1993
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;; FILING DATE: 04-APR-1988
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Seidman, Stephanie L.
;; REGISTRATION NUMBER: 33,779
;; REFERENCE/DOCKET NUMBER: 6362-55038
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (619) 238-0999
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; Patent No. 6090623
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/949,386
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/290,012
; FILING DATE: 11-AUG-1994
; APPLICATION NUMBER: 08/149,097
; FILING DATE: 5-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/105,536
; FILING DATE: 11-AUG-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 519808
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 238-0999
; TELEFAX: (619) 238-0062
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
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US-08-949-386-11

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seq_documentation_block:
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; Patent No. 6096514
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; APPLICANT: Feldman, Daniel
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/450,562
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; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/404,950
; FILING DATE: 13-MAR-1995
; APPLICATION NUMBER: 08/336,257
; FILING DATE: 7-NOV-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/314,083
; FILING DATE: 28-SEPT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/311,363
; FILING DATE: 23-SEPT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/290,012
; FILING DATE: 11-AUG-1994
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; FILING DATE: 07-FEB-1994
; PRIOR APPLICATION DATA:
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/105,536
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; APPLICATION NUMBER: 07/914,231
; FILING DATE: 13-JULY-1992
; PRIOR APPLICATION DATA:
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; FILING DATE: 15-AUG-1991
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; APPLICATION NUMBER: 07/482,384
; FILING DATE: 02-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-519812
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 238-0999
; TELEFAX: (619) 238-0062
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3600 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
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; LOCATION: 35..3310
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; Sequence 3, Application US/08713118

; Patent No. 6040436

; GENERAL INFORMATION:

; APPLICANT: Franco, Rodrigo

; APPLICANT: Sun Chen, Ai Ru

; APPLICANT: Suey, David J.

; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL

; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS

; NUMBER OF SEQUENCES: 6

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.

; STREET: Two Militia Drive

; CITY: Lexington

; STATE: MA

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: COUNTRY: USA
: ZIP: 02173-4799
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/713,118
: FILING DATE: 16-SEP-1996
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Meta, Elizabeth W.
: REGISTRATION NUMBER: 38,236
: REFERENCE/DOCKET NUMBER: ACC96-01
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 617-861-6240
: TELEFAX: 617-861-9540
: INFORMATION FOR SEQ ID NO: 3:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 3298 base pairs
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: STRANDEDNESS: double
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; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452.007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713.118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:
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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
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; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 20:
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: Patent No. 5851824
: GENERAL INFORMATION:
: APPLICANT: Harpold, Michael
: APPLICANT: Ellis, Steven
: APPLICANT: Williams, Mark
: APPLICANT: Feldman, Daniel
: APPLICANT: McCue, Ann
: APPLICANT: Brenner, Robert
: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
: NUMBER OF SEQUENCES: 57
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Brown, Martin, Haller & McClain
: STREET: 1660 Union Street
: CITY: San Diego
: STATE: California
: COUNTRY: USA
: ZIP: 92101-2926
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette
: COMPUTER: IBM Compatible
: OPERATING SYSTEM: DOS
: SOFTWARE: FastSeq Version 1.5
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/223,305C
: FILING DATE: April 4, 1994
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 07/868,354
: FILING DATE: April 10, 1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/745,206
: FILING DATE: 15-AUG-1991
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/620,250
: FILING DATE: 30-NOV-1990
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/482,384
: FILING DATE: 20-FEB-1990
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/603,751
: FILING DATE: 04-APR-1989
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: WO PCT/US89/01408
: FILING DATE: 04-APR-1989
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/176,899
: FILING DATE: 04-APR-1988
: ATTORNEY/AGENT INFORMATION:
: NAME: Seldman, Stephanie L.
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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; METHOD OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
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; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
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; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
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 301 ValSerCysPheGlnHisLeuValGlnAlaAsnValArgAsnLysLysVa 317
 935 GTAAAGCTGTTTCAGCACCTTGTCCAAAGCAAAATGTAAGAAATAAAAGT 984
 317 lLeuLysAspAlaValAsnAsnIleThrAlaLysGlyIleThrAspTyrL 334
 985 GTTGAAGACGGGTGAATAATATACACCCAAAGGAATTACAGATTATA 1034
 334 yLysGlyPheSerPheAlaPheGluGlnLeuLeuAsnTyrAsnValSer 350
 1035 AGAAGGGCTTTAGTTTGTCTTTTGAACAGCTGCTTAATTATATATGTTCC 1084
 351 ArgAlaAsnCysAsnLysIleIleMetLeuPheThrAspGlyGlyGluG 367
 1085 AGGCAAACTGCNAATGAAGATTATTATGCTATTACCGGATGGAGGAGAAGA 1134
 367 uArgAlaGlnGluIlePheAsnLysTyrAsnLysAspLysLysValArgV 384
 1135 GAGAGCCAGGAGATATTAAACAATACATAAAGATAAAGATAAAGTACGGT 1184
 384 aPheArgPheSerValGlyGlnHisAsnTyrGluArgGlyProIleGln 400
 1185 TATTCAGGTTTCAGTTGGTCAACAATATATGAGAGAGACCTATTACAG 1234
 401 TrpMetAlaCysLeuAsnLysGlyTyrTyrTyrGluIleProSerIleGl 417
 1235 TGGATGGCTGTGAAACAAGAGTTATTATTATGAAATTCCTTCCATTGG 1284
 417 yAlaIleArgIleAsnThrGlnGluTyrLeuAspValLeuGlyArgProM 434
 1285 TGAATAAGAATCAATACTACAGGAATATTGGATGTTTGGGAAGACCAA 1334
 434 etValLeuAlaGlyAspLysAlaLysGlnValGlnTrpThrAsnValTyr 450
 1335 TGGTTTATACAGGACAAAGCTAAGCAAGTCCAATGGACAAATGTGTAC 1384
 451 LeuAspAlaLeuGluGlyLeuValIleThrGlyThrLeuProValPhe 467
 1385 CTGGATGATTCGAACTGGGACTTGTTCATTTACTGGAACCTCTTCGGGTCT 1434
 467 eAsnIleThrGlyGlnPheGluAsnLysThrAsnLeuLysAsnGlnLeuI 484
 1435 CAACATAACCGCCCAATTGAAAAATAAGACAACTTAAGAAACCACTGA 1484
 484 lLeuGlyValMetGlyValAspValSerLeuGluAspIleLysArgLeu 500
 1485 TTCTTGGTGTGATGGAGTAGATGTCTTTTGGAAAGATATTAAGAGACTG 1534
 501 ThrProArgPheThrLeuCysProAsnGlyTyrTyrPheAlaIleAspPr 517

1535 ACACCAGCTTTTACACTGTGCCCAATGGTATTACTTTGCAATCGATCC 1584
 517 oAsnGlyTyrValLeuLeuHisProAsnLeuGlnProLysAsnProLysS 534
 1585 TAATGGTTATGTTTATTATACATCCAAATCTTCAGCCAAAG..... 1624
 534 erGlnGluProValThrLeuAspPheLeuAspAlaGluLeuGluAsnAsp 550
 1625GAGCCAGTAACATTGGATTTCCTTCATGCAGAGTTAGAGAATGAT 1669
 551 lLysValGluIleArgAsnLysMetIleAspGlyGluSerGlyGluLys 567
 1670 ATTAAAGTGGAGATTGGAATAAGATGATTGATGGGAAAGTGGAGAAAA 1719
 567 sThrPheArgThrLeuValLysSerGlnAspGluArgTyrIleAspLysG 584
 1720 ACATTTCAGACTCTGTTAAATCTCAAGATGAGAGATATTGACAAAG 1769
 584 lYAsnArgThrTyrThrTrpThrProValAsnGlyThrAspTyrSerLeu 600
 1770 GAAACAGGACATACACATGCACACCTGCTCAATGGCACAGATTACAGTTG 1819
 601 AlaLeuValLeuProThrTyrSerPheTyrTyrIleLysAlaLysLeuG 617
 1820 GCCTTGGTATTACCAACCTACAGTCTTTTACTATATAAAGCCAACTAGA 1869
 617 uGluThrIleThrGlnAlaArgSerLysLysGlyLysMetLysAspSerG 634
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 667 eLeuLeuAsnPheAsnGluPheIleAspArgLysThrProAsnAsnProS 684
 2020 TCTTTTAAATTTCAACAGTTTATTATAGAGTCTTGCTGTGATGAGCTTTACA 2069
 684 erCysAsnAlaAspLeuIleAsnArgValLeuLeuAspAlaGlyPheThr 700
 2070 CATGTAACCGGATTTGATTATAGAGTCTTGCTGTGATGAGCTTTACA 2119
 701 AsnGluLeuValGlnAsnTyrTrpSerLysGlnLysAsnIleLysGlyVa 717
 2120 AATGAACCTTGTCCAAATTTACTGGAGTAAGCAGAAAAATATCAAGGAGT 2169
 717 lLysAlaArgPheValValThrAspGlyGlyIleThrArgValTyrProL 734
 2170 GAAAGCAGATTTGTTGTACATGATGGTGGGATTAACAGAGTTTATCCCA 2219
 734 ysGluAlaGlyGluAsnTrpGlnGluAsnProGluThrTyrGluAspSer 750
 2220 AAGAGCTGGAGAAAAATTTGGCAAGAAACCCAGAGACATATGAGGACAGC 2269
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 2270 TTCTATAAAGAGGCTAGATAATGATACTATGTTTTCACCTGCTCCCTA 2319
 767 rPheAsnLysSerGlyProGlyValAlaTyrGluSerGlyIleMetValSerL 784
 2320 CTTTAAACAAAGTGGACCTGGTGCCTATGAAATCGGGCATTATGGTAAGCA 2369
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 2370 AAGCTGTAGAAATATATATTCAAGGAAACTTCTTAAACCTGCAGTTGT 2419
 801 GlyIleLysIleAspValAsnSerTrpIleGluAsnPheThrLysThrSe 817

2420 GGAATTAAAAATTGATCTAAATTCCTGGATAGAGAATTTCCACCAAAACCTC 2469
817 rIleArgaspProCysAlaGlyProValCysaspCysLysArgAsnSera 834
2470 AATCAGAGATCCGTGTGTGGTCCAGTTTGTGACTGCAAAAGAAACAGTG 2519
834 spValMetaspCysValIleLeuAspAspGlyGlyPheLeuLeuMetAla 850
2520 ACGTAATGGATTGTGTGATTCTGGGATGATGGTGGGTTTCTTCTGATGCA 2569
851 AsnHisAspAspTyrThrAsnGlnIleGlyArgPhePheGlyGluIleAs 867
2570 AATCATGATGATTACTAATCAGATTGCAAGATTTTGGAGAGATTGA 2619
867 pProSerLeuMetArgHisLeuValAsnIleSerValTyrAlaPheAsnL 884
2620 TCCCAGCTTGATGAGACACCTGGTTAATATATATCAGTTTATGCTTTTAA 2669
884 ysSerTyrAspTyrGlnSerValCysGluProGlyAlaAlaProLysGln 900
2670 AATCTTATGATTATCAGTCAGTATGTGAGCCGGTGTGCACCAAAACAA 2719
901 GlyAlaGlyHisArgSerAlaTyrValProSerValAlaAspIleLeuG1 917
2720 GGAGCAGGACATCGCTCAGCATATGTCATCAGTAGCAGACATATTACA 2769
917 nIleGlyTrpTrpAlaThrAlaAlaAlaTrpSerIleLeuGlnPheL 934
2770 AATGGCTGGTGGGCCACTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2819
934 euLeuSerLeuThrPheProArgLeuLeuGluAlaValGluMetGluasp 950
2820 TCTTGAGTTTGACCTTCCACGACTCCTTGAGGGCAGTTGAGATGGAGGAT 2869
951 AspAspPheThrAlaSerLeuSerLysGlnSerCysIleThrGluGlnTh 967
2870 GATGACTTCACGGCTCCCTGTCCAAGCAGAGCTGCATTACTGACAAAC 2919
967 rGlnTyrPhePheAspAsnAspSerLysSerPheSerGlyValLeuAspC 984
2920 CCAGTATTTCTTCGATAACGACAGTAATATCATTCAGTGGTGTATTAGACT 2969
984 ysGlyAsnCysSerArgIlePheHisGlyGluLysLeuMetAsnThrAsn 1000
2970 GTGGAACTGTTCCAGATCTTTCATGGAGAAAAGCTTATGAACACCAAC 3019
1001 LeuIlePheIleMetValIleuSerLysGlyThrCysProCysAspThrAr 1017
3020 TTAATATTCAATAATGGTTGAGAGCAAGGACATGTCCTCATGTGACACAG 3069
1017 gLeuLeuIleGlnAlaGluGlnThrSerAspGlyProAsnProCysAspM 1034
3070 ACTGCTCATACAAGCGGAGCAGACTTCTGACGGTCCAAATCCTTGTGACA 3119
1034 etValLysGlnProArgTyrArgLysGlyProAspValCysPheaspAsn 1050
3120 TGGTTAACCAACCTAGATACCAGAAAGGCGCTGATGCTGCTGTTGATAAC 3169
1051 AsnValLeuGluAspTyrThrAspCysGlyGlyValSer 1063
3170 AATGCTTGGAGATTATACTGACTGTGGTGGTGTCT 3208

QY 61 YEKYODLYTVPNNARQLVEIAARDIEKLLNRSKALVSLALEAEKVQAAHQRDFASN 120
DB 61 YEKYODLYTVPNNARQLVEIAARDIEKLLNRSKALVSLALEAEKVQAAHQRDFASN 120
QY 121 EVVYNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROISYCHAAVHIPTDIYEGSTIVL 180
DB 121 EVVYNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROISYCHAAVHIPTDIYEGSTIVL 180
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DB 181 NELNWTSADEVEKKNREEDSLWQVGSATGLARYYPASPWVDSNTPKNKIDLYDVR 240
QY 241 RFWYIQAASPKDMLILVDVSGVSLGLTKLIRTSVSEMLETSLDDDFNVVASFNSNAQD 300
DB 241 RFWYIQAASPKDMLILVDVSGVSLGLTKLIRTSVSEMLETSLDDDFNVVASFNSNAQD 300
QY 301 VSCFQHLVQANVRNKKVLKDVANNITAKGIDYDKGFSFAEQLLNYNVSRANCKNIIML 360
DB 301 VSCFQHLVQANVRNKKVLKDVANNITAKGIDYDKGFSFAEQLLNYNVSRANCKNIIML 360
QY 361 FTDGGEERAQEIFKNYKDKVRFRFVSQGHNYERGPIONMACENKGYIYEIPSIGAIR 420
DB 361 FTDGGEERAQEIFKNYKDKVRFRFVSQGHNYERGPIONMACENKGYIYEIPSIGAIR 420
QY 421 INTOEYLDVGRPMVLGDKAKQVQWTVNYLDALGLVITGTLVPVFNITGQFENKTNLK 480
DB 421 INTOEYLDVGRPMVLGDKAKQVQWTVNYLDALGLVITGTLVPVFNITGQFENKTNLK 480
QY 481 NOLILGVNGVDVSLIEDIRLTPRFTLCPNGYFFAIDPNGYVLLHNPKNPKSOEPTVL 540
DB 481 NOLILGVNGVDVSLIEDIRLTPRFTLCPNGYFFAIDPNGYVLLHNPKNPKSOEPTVL 540
QY 541 DFLDAELENKIVERNKMDGSEKFTRLVKSDERYIDKGNRTYTPVNGTDYSL 600
DB 541 DFLDAELENKIVERNKMDGSEKFTRLVKSDERYIDKGNRTYTPVNGTDYSL 600
QY 601 ALVLPYTFYIIKAKLEETITQARSKKGMKMDSETLKPDNFEESGYTFIAPRDYCNLDKI 660
DB 601 ALVLPYTFYIIKAKLEETITQARSKKGMKMDSETLKPDNFEESGYTFIAPRDYCNLDKI 660
QY 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYNSKOKNKGKVKAR 720
DB 661 SONNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTNELVQYNSKOKNKGKVKAR 720
QY 721 FVYTDGGITRVYKPEAGENWQENPTYEDSYKRSLDNDNVFTAPYFNKSGPGAYESGI 780
DB 721 FVYTDGGITRVYKPEAGENWQENPTYEDSYKRSLDNDNVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVGIKIDVNSWIENFTKTSIRDPKAGVPCDKRNSDVMDCVI 840
DB 781 MYSKAVEIYIOGKLLKPAVGIKIDVNSWIENFTKTSIRDPKAGVPCDKRNSDVMDCVI 840
QY 841 LDDGFFLLMANHDDYTNQIGRFFGEIDPSLRHLNINISYAFNKSQYQVCEPGAAPKQ 900
DB 841 LDDGFFLLMANHDDYTNQIGRFFGEIDPSLRHLNINISYAFNKSQYQVCEPGAAPKQ 900
QY 901 GAGHSAYVPSVADILQIGWATAAASILQOFLSLFPRLLEAVEMDDFTASLSKQ 960
DB 901 GAGHSAYVPSVADILQIGWATAAASILQOFLSLFPRLLEAVEMDDFTASLSKQ 960
QY 961 SCITBOTQYFFDNDKSFSGVLDGNCNKRIFHGEKLMNTNIFIMVESKGTCPDCTRLI 1020
DB 961 SCITBOTQYFFDNDKSFSGVLDGNCNKRIFHGEKLMNTNIFIMVESKGTCPDCTRLI 1020
QY 1021 QAEQTSQDGNPCDMVK 1036
DB 1021 QAEQTSQDGNPCDMVK 1036

RESULT 2
US-08-455-543A-52
; Sequence 52, Application US/08455543A

; Patent NO. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seigman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; US-08-455-543A-52

Query Match 100.0%; Score 5443; DB 1; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1036; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAAGCLIALTLTFLQSLIGPSSPEPPSAVTIKSWDKMQEDLVTLAKTAGVNLVDI 60

Db 1 MAAGCLLALTTLTFLQSLIGSSSEPPFSVATIKSWDKQEDLVTLAKTAGVNLVDI 60
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Db 61 YEKYQDLTYVEPNARQVLAARIEKLLSNRSKALVSLALEAEKVQAAHOWREDFASN 120
Qy 121 EVVYNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPSQRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Qy 181 NELNWTSSALDEVFKKNREDESLWQVFGSATGLARYYPASPWVDNSRTPNKIDLYDVR 240
Db 181 NELNWTSSALDEVFKKNREDESLWQVFGSATGLARYYPASPWVDNSRTPNKIDLYDVR 240
Qy 241 RPWYIQAASPKDMLILVDVSGVSGTLKILRTSVSEMLETSLDDDDPVNVSFNSNAQD 300
Db 241 RPWYIQAASPKDMLILVDVSGVSGTLKILRTSVSEMLETSLDDDDPVNVSFNSNAQD 300
Qy 301 VSCFOHLVQANVRNKKVLUKDAVNNTAKGIDYKKGFSFAFEQLLNNVSRANCKNIIML 360
Db 301 VSCFOHLVQANVRNKKVLUKDAVNNTAKGIDYKKGFSFAFEQLLNNVSRANCKNIIML 360
Qy 361 FTDGGEERAQEFNKYNKDKVRFRFSVGQHNVERGPIQMACENKGYIYIPISIGAIR 420
Db 361 FTDGGEERAQEFNKYNKDKVRFRFSVGQHNVERGPIQMACENKGYIYIPISIGAIR 420
Qy 421 INTQBYLDVLRPMVLAGDKAQVQWTVNYLDALGLVITGTLVPFNITQGFENKTNLK 480
Db 421 INTQBYLDVLRPMVLAGDKAQVQWTVNYLDALGLVITGTLVPFNITQGFENKTNLK 480
Qy 481 NQLILGVMGVDVSLIEDIKRLTPRTCLPNCYGFADPNQYVLLHPNLPKPKSOEPTVL 540
Db 481 NQLILGVMGVDVSLIEDIKRLTPRTCLPNCYGFADPNQYVLLHPNLPKPKSOEPTVL 540
Qy 541 DFLDAELNDLKVLRNKMIDGSEKFTRLVKSDERYIDKGNRTYTWTPVNGTDVSL 600
Db 541 DFLDAELNDLKVLRNKMIDGSEKFTRLVKSDERYIDKGNRTYTWTPVNGTDVSL 600
Qy 601 ALVLPYTSFYIKAKLETTIQAQSKKMKMDSETLKPDPNEESGYTFIAPRDYCNLDKI 660
Db 601 ALVLPYTSFYIKAKLETTIQAQSKKMKMDSETLKPDPNEESGYTFIAPRDYCNLDKI 660
Qy 661 SDNTEFLNNEFIDRKTNPNSCNADLINRVLDAGFTNQLVQYWSKQKNIKGVKAR 720
Db 661 SDNTEFLNNEFIDRKTNPNSCNADLINRVLDAGFTNQLVQYWSKQKNIKGVKAR 720
Qy 721 FVVTDDGGITRVYKPEAGENWQENPETEYDSFKRSLDNDNVFTAPYFNKSGPGAYESGI 780
Db 721 FVVTDDGGITRVYKPEAGENWQENPETEYDSFKRSLDNDNVFTAPYFNKSGPGAYESGI 780
Qy 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPACGVCDCRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPACGVCDCRNSDVMDCVI 840
Qy 841 LDGCGFLMANHDDYTNQIGRFFGEIDPSLMRHLNVSIVAFNKSIDYQSYCEPAAPKQ 900
Db 841 LDGCGFLMANHDDYTNQIGRFFGEIDPSLMRHLNVSIVAFNKSIDYQSYCEPAAPKQ 900
Qy 901 GAGHSAYVPSVADILQIGWATAAASILQOFLLSLTFPRLLEAVEMDDDFASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAASILQOFLLSLTFPRLLEAVEMDDDFASLSKQ 960
Qy 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSIRIFHGEKLMNTNLIIFIMVESKGCPCDTRLLI 1020
Db 961 SCITEQTOYFFDNDKSFSGVLDGCGNCSIRIFHGEKLMNTNLIIFIMVESKGCPCDTRLLI 1020
Qy 1021 QAEQTSQDGNPCDMVK 1036
Db 1021 QAEQTSQDGNPCDMVK 1036

RESULT 3

US-08-223-305C-52
; Sequence 52, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELEPHONE: (619)238-0099
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-223-305C-52

Query Match 100.0%; Score 5443; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1036; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MAAGCLLALTTLTFLQSLIGSSSEPPFSVATIKSWDKQEDLVTLAKTAGVNLVDI 60
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Db 1 MAAGCLLALTTLTFLQSLIGPSSSEPPFSAVTIKSWDKMQEDLVTLAKTAGVGNQLYDI 60
QY 61 YEKYQDLYTVENPNARQVLAARDIEKLLNSRKALVSLALEAEKVQAAHQRWEDFASN 120
Db 61 YEKYQDLYTVENPNARQVLAARDIEKLLNSRKALVSLALEAEKVQAAHQRWEDFASN 120
QY 121 EVVYNKADDDLDPEKNDESPQSRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Db 121 EVVYNKADDDLDPEKNDESPQSRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSSALDEVFKKNNREEDPSLLWQVFGSATGLARYYPASFPWVDSNRTPNKIDLYDVR 240
Db 181 NELNWTSSALDEVFKKNNREEDPSLLWQVFGSATGLARYYPASFPWVDSNRTPNKIDLYDVR 240
QY 241 RPWYIQGAASPKDMLILVDVSGSVGLTKLIRTSVSEMLETSLDDDDFVNVASFNSAQD 300
Db 241 RPWYIQGAASPKDMLILVDVSGSVGLTKLIRTSVSEMLETSLDDDDFVNVASFNSAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSAFEQQLNLYNVRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSAFEQQLNLYNVRANCNKIIML 360
QY 361 FTDGGEERAQELFNKYNKDKKRVFRFSGVGHNYERGPIONMACENKGYIYEIPSGAIR 420
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QY 421 INTQBYLDVLRPMVLAGDKAKOVQWTVNYLDALGLVITGTLFVFNITGOFENKTNLK 480
Db 421 INTQBYLDVLRPMVLAGDKAKOVQWTVNYLDALGLVITGTLFVFNITGOFENKTNLK 480
QY 481 NQLILGVGVDSLEDIKRLPRFTLCNPGYFEADPNGYVLLHPNLOPKPKSOEPTVL 540
Db 481 NQLILGVGVDSLEDIKRLPRFTLCNPGYFEADPNGYVLLHPNLOPKPKSOEPTVL 540
QY 541 DFLDALENDIKVEIRNMKGESSEKFTRLVKSQDERYIDKGNRTYVTPVNGTDYSL 600
Db 541 DFLDALENDIKVEIRNMKGESSEKFTRLVKSQDERYIDKGNRTYVTPVNGTDYSL 600
QY 601 ALVLPYTFYIKAKLEETITQARSKKGMKMDSETLKPDPNFEESGYTFIAPRDYCNLDKI 660
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QY 661 SDNTEFLNNEFTDRKTPNPNPCNADL INRVLLDAGFTNELVQNYWSKOKNIKGVKAR 720
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Db 721 FVYTDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPKAGPVCCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPKAGPVCCKRNSDVMDCVI 840
QY 841 LDGGLFLMANHDDYTNGIRFFGIDPSLMRHLNYSVIAFNKSYDYSQVCEPGAAPKQ 900
Db 841 LDGGLFLMANHDDYTNGIRFFGIDPSLMRHLNYSVIAFNKSYDYSQVCEPGAAPKQ 900
QY 901 GAGHSATVPSVADLIQGWATAAASLIQOFLSLFPRLEAVENEDDDFTASLSKQ 960
Db 901 GAGHSATVPSVADLIQGWATAAASLIQOFLSLFPRLEAVENEDDDFTASLSKQ 960
QY 961 SCITQOTQYFFDNDKSPSGVLDGNCNKRIFPHGEKLMNTLIFINVESKGCPCDTRLLI 1020
Db 961 SCITQOTQYFFDNDKSPSGVLDGNCNKRIFPHGEKLMNTLIFINVESKGCPCDTRLLI 1020
QY 1021 QAEQTSNCGNPNCDMWK 1036
Db 1021 QAEQTSNCGNPNCDMWK 1036

RESULT 4

US-08-311-363-25

; Sequence 25, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Hallier & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311.363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-311-363-25

Query Match 100.0%; Score 5443; DB 2; Length 1091;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1036; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MAAGCLLALTTLTFLQSLIGPSSSEPPFSAVTIKSWDKMQEDLVTLAKTAGVGNQLYDI 60
Db 1 MAAGCLLALTTLTFLQSLIGPSSSEPPFSAVTIKSWDKMQEDLVTLAKTAGVGNQLYDI 60
QY 61 YEKYQDLYTVENPNARQVLAARDIEKLLNSRKALVSLALEAEKVQAAHQRWEDFASN 120
Db 61 YEKYQDLYTVENPNARQVLAARDIEKLLNSRKALVSLALEAEKVQAAHQRWEDFASN 120
QY 121 EVVYNKADDDLDPEKNDESPQSRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Db 121 EVVYNKADDDLDPEKNDESPQSRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSSALDEVFKKNNREEDPSLLWQVFGSATGLARYYPASFPWVDSNRTPNKIDLYDVR 240
Db 181 NELNWTSSALDEVFKKNNREEDPSLLWQVFGSATGLARYYPASFPWVDSNRTPNKIDLYDVR 240
QY 241 RPWYIQGAASPKDMLILVDVSGSVGLTKLIRTSVSEMLETSLDDDDFVNVASFNSAQD 300
Db 241 RPWYIQGAASPKDMLILVDVSGSVGLTKLIRTSVSEMLETSLDDDDFVNVASFNSAQD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSAFEQQLNLYNVRANCNKIIML 360
Db 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSAFEQQLNLYNVRANCNKIIML 360

Db 721 FVTDGGITRVYPKEAGENWQENPETYEDSYKRSKSLDNDNVFTAPYFNKSGPGAYESGI 780
Qy 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI 840
Qy 841 LDGGLFLMANHDDYTNOIGRFFGEIDPSLMRHLVNIISVYAFNKSIDYQSVCEPGAAPKQ 900
Db 841 LDGGLFLMANHDDYTNOIGRFFGEIDPSLMRHLVNIISVYAFNKSIDYQSVCEPGAAPKQ 900
Qy 901 GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLTFPRLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLTFPRLLEAVEMEDDDFTASLSKQ 960
Qy 961 SCITEQTYFFDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVSKGTCPCDTRLLI 1020
Db 961 SCITEQTYFFDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVSKGTCPCDTRLLI 1020
Qy 1021 QAEQTSQGNPCDMVK 1036
Db 1021 QAEQTSQGNPCDMVK 1036

RESULT 6

US-09-452-007-4
; Sequence 4, Application US/09452007
; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1091 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

Query Match 99.9%; Score 5439; DB 4; Length 1091;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1035; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MAACCLLALTLTLFQSLLLIGPSSSEPPPSAVTIKSWDKMQEDELVTI LAKTAGSGVNLVDI 60
Db 1 MAACCLLALTLTLFQSLLLIGPSSSEPPPSAVTIKSWDKMQEDELVTI LAKTAGSGVNLVDI 60
Qy 61 YEKQDLYTVPNNARQIVETAAARDIEKLLSNRSKALVSALAEKVAQAAHOWREDFASN 120
Db 61 YEKQDLYTVPNNARQIVETAAARDIEKLLSNRSKALVSALAEKVAQAAHOWREDFASN 120
Qy 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGQISYQHAHVHPTDIYEGSTIVL 180
Qy 181 NELNWTALDEVEFKKNEEDPSLLWQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
Db 181 NELNWTALDEVEFKKNEEDPSLLWQVFGSATGLARYYPASPWDNSRTPNKIDLYDVR 240
Qy 241 RPWYIOGAASPKDMLILVDYSGVSGSLTKLIRTSVSEMLETSLDDDFVNVASFNSNAQD 300
Db 241 RPWYIOGAASPKDMLILVDYSGVSGSLTKLIRTSVSEMLETSLDDDFVNVASFNSNAQD 300
Qy 301 VSCFOHLVQANVRNKKVYLDKAVNNITAKGIDYKKGFSFAFEQLLNYSRANCNKIIML 360
Db 301 VSCFOHLVQANVRNKKVYLDKAVNNITAKGIDYKKGFSFAFEQLLNYSRANCNKIIML 360
Qy 361 FTGGEERAQEIFNKYNKDKKVRVRFESVGOHNYERGIOMMACENKGYIYEIPSGAIR 420
Db 361 FTGGEERAQEIFNKYNKDKKVRVRFESVGOHNYERGIOMMACENKGYIYEIPSGAIR 420
Qy 421 INTQEYLDVLGRPMVLADGAKAQVQWNTNVLDALDELGLVITGLTPVFNITQGFENKTLK 480
Db 421 INTQEYLDVLGRPMVLADGAKAQVQWNTNVLDALDELGLVITGLTPVFNITQGFENKTLK 480
Qy 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYFAIDPNGYVLLHPNLPKPKSQEPVTL 540
Db 481 NQLILGVMGVDVSLIEDIKRLTPRETLCPNGYFAIDPNGYVLLHPNLPKPKSQEPVTL 540
Qy 541 DFDAELENDIKVEIRNKMIDGESGKTFRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
Db 541 DFDAELENDIKVEIRNKMIDGESGKTFRTLVKSQDERYIDKGNRTYTWTPVNGTDYSL 600
Qy 601 ALVLPYTFYIYKAKLEETITQARKSKGKMDSETLKPDPNFEESGYTFIAPRDYCNDLKI 660
Db 601 ALVLPYTFYIYKAKLEETITQARKSKGKMDSETLKPDPNFEESGYTFIAPRDYCNDLKI 660
Qy 661 SDNTEFLNFEIDRKTNNPCNADLINRVLLDAGFTNELVQNYWSKQKNIKGVKAR 720
Db 661 SDNTEFLNFEIDRKTNNPCNADLINRVLLDAGFTNELVQNYWSKQKNIKGVKAR 720
Qy 721 FVTDGGITRVYPKEAGENWQENPETYEDSYKRSKSLDNDNVFTAPYFNKSGPGAYESGI 780
Db 721 FVTDGGITRVYPKEAGENWQENPETYEDSYKRSKSLDNDNVFTAPYFNKSGPGAYESGI 780
Qy 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI 840
Db 781 MYSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCCKRNSDVMDCVI 840
Qy 841 LDGGLFLMANHDDYTNOIGRFFGEIDPSLMRHLVNIISVYAFNKSIDYQSVCEPGAAPKQ 900
Db 841 LDGGLFLMANHDDYTNOIGRFFGEIDPSLMRHLVNIISVYAFNKSIDYQSVCEPGAAPKQ 900
Qy 901 GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLTFPRLLEAVEMEDDDFTASLSKQ 960
Db 901 GAGHSAYVPSVADILQIGWATAAANSILOQFLLSLTFPRLLEAVEMEDDDFTASLSKQ 960
Qy 961 SCITEQTYFFDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVSKGTCPCDTRLLI 1020
Db 961 SCITEQTYFFDNDKSFSGVLDGCGNCSRIHFHGEKLMNTNLIIFIMVSKGTCPCDTRLLI 1020
Qy 1021 QAEQTSQGNPCDMVK 1036
Db 1021 QAEQTSQGNPCDMVK 1036

RESULT 7
US-08-543A-54
Sequence 54, Application US/0845543A
Patent No. 5792846
GENERAL INFORMATION:
APPLICANT: Harpold, Michael
APPLICANT: Ellis, Steven
APPLICANT: Williams, Mark
APPLICANT: Feldman, Daniel
APPLICANT: McCue, Ann
APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSER: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223,305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603,751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGTH: 1086 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-455-543A-54

Query Match 99.3%; Score 5403.5; DB 1; Length 1086;

Best Local Similarity 99.5%; Pred. No. 0;
Matches 1031; Conservative 0; Mismatches 0; Indels 5; Gaps 1;
QY 1 MAAGCLLALTTLTFLFOSLLIGPSSEPPFPSPAVTIKSWDKMOEDLVLTAKTASGVNOLVDI 60
DB 1 MAAGCLLALTTLTFLFOSLLIGPSSEPPFPSPAVTIKSWDKMOEDLVLTAKTASGVNOLVDI 60
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHOREDFASN 120
DB 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHOREDFASN 120
QY 121 EYVYNAKDDLDPEKNDSEPSGSRQIKPVIEDANFGROISYQHAHVHIPTDIYEGSTIVL 180
DB 121 EYVYNAKDDLDPEKNDSEPSGSRQIKPVIEDANFGROISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNMTSALDEYFVKKNREEDPSLLMQVFGSATGLARIYPASPWVDNSRTPNKIDLDYDVR 240
DB 181 NELNMTSALDEYFVKKNREEDPSLLMQVFGSATGLARIYPASPWVDNSRTPNKIDLDYDVR 240
QY 241 RPWYIQGAASPKDMLILVDVSGVSGLTALKLIRTSVSEMLETSLDSDDFNVNASFNNAQD 300
DB 241 RPWYIQGAASPKDMLILVDVSGVSGLTALKLIRTSVSEMLETSLDSDDFNVNASFNNAQD 300
QY 301 VSCFOHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFQOLLNANVSRANCKIIML 360
DB 301 VSCFOHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFQOLLNANVSRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYKNDKKVRFVSQGHNYERGPQIOWMACENKGYIYEIPSGAIR 420
DB 361 FTDGGEERAQEIFNKYKNDKKVRFVSQGHNYERGPQIOWMACENKGYIYEIPSGAIR 420
QY 421 INTQEYLDVLRPMVLGAKAKOVQNTNYLDALGLVITGLPVFNITGQFENKTNLK 480
DB 421 INTQEYLDVLRPMVLGAKAKOVQNTNYLDALGLVITGLPVFNITGQFENKTNLK 480
QY 481 NQLILGVMGVDVSLDKRLTFRFTLCPNGYFAIDPNGVYLLHPLNLPKSPASQBPVTL 540
DB 481 NQLILGVMGVDVSLDKRLTFRFTLCPNGYFAIDPNGVYLLHPLNLPKSPASQBPVTL 540
QY 541 DFLDAELENDIKVEIRNKMIDGESGKERTLVKSQDERYIDKGNRTYTWTPVNGDYSL 600
DB 541 DFLDAELENDIKVEIRNKMIDGESGKERTLVKSQDERYIDKGNRTYTWTPVNGDYSL 600
QY 601 ALVLPYTFYIIKAKLEETITQARSKKGMKDSSETLKPONFESGYTFIAPROYCNDLKI 660
DB 601 ALVLPYTFYIIKAKLEETITQARSKKGMKDSSETLKPONFESGYTFIAPROYCNDLKI 660
QY 661 SDNTEFLNFEFIDRKTPNPNPCNADLINRVLLDAGETNELVQYWSKQKNIKGVKAR 720
DB 661 SDNTEFLNFEFIDRKTPNPNPCNADLINRVLLDAGETNELVQYWSKQKNIKGVKAR 720
QY 721 FVVTGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
DB 721 FVVTGGITRVYPKEAGENQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MYSKAVEIYIQGKLLKPAVVGKIDVNSWIENTFTSIRDPCAGPVCDCCKRNSDVMDCVI 840
DB 781 MYSKAVEIYIQGKLLKPAVVGKIDVNSWIENTFTSIRDPCAGPVCDCCKRNSDVMDCVI 840
QY 841 LDDGGFLMANHDDYTNOIGRFGEIDPSLMRHLVNIYSYAFNKSVDYQSVCEPQAPKQ 900
DB 841 LDDGGFLMANHDDYTNOIGRFGEIDPSLMRHLVNIYSYAFNKSVDYQSVCEPQAPKQ 900
QY 901 GAGHRSAYVPSVADILQIGWATAAAWSILQOFLSLTTPRILLEAVEMEDDDFTASLSKQ 960
DB 901 GAGHRSAYVPSVADILQIGWATAAAWSILQOFLSLTTPRILLEAVEMEDDDFTASLSKQ 960
QY 961 SCITEQTYFFNDNSKSFVGLDCGNCSEIFHGEKLMNTNLIFIMVESKTCPCDTRLLI 1020
DB 961 SCITEQTYFFNDNSKSFVGLDCGNCSEIFHGEKLMNTNLIFIMVESKTCPCDTRLLI 1020
QY 1021 QAEQTSDDGNPCDMVK 1036
DB 1021 QAEQTSDDGNPCDMVK 1036

Db 1016 QAEQTS DGPNC DMVK 1031

RESULT

US-08-223-305C-54

; Sequence 54, Application US/08223305C

; Patent No. 5851824

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; TITLE OF INVENTION: METHODS

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

; CITY: San Diego

; STATE: California

; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSeq Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/223,305C

; FILING DATE: April 4, 1994

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: 07/868,354

; FILING DATE: April 10, 1992

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/745,206

; FILING DATE: 15-AUG-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/620,250

; FILING DATE: 30-NOV-1990

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/482,384

; FILING DATE: 20-FEB-1990

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/603,751

; FILING DATE: 04-APR-1989

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: WO PCT/US89/01408

; FILING DATE: 04-APR-1989

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/176,899

; FILING DATE: 04-APR-1988

; ATTORNEY/AGENT INFORMATION:

; NAME: Seidman, Stephanie L.

; REGISTRATION NUMBER: 33,779

; REFERENCE/DOCKET NUMBER: 52516 (P519739)

; TELEPHONE: (619)238-0999

; TELEFAX: (619)238-0062

; INFORMATION FOR SEQ ID NO: 54:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1086 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FRAGMENT TYPE: internal

; US-08-223-305C-54

Query Match

Best Local Similarity 99.3%; Score 5403.5; DB 2; Length 1086;

99.5%; Pred. No. 0;

	Matches 1031;	Conservative	0;	Mismatches	0;	Indels	5;	Gaps	1;
QY	1	MAACLLALATLTLFQSL	IGPSSSEPPPSAVTI	IKSWDKMQEDLVTLAKT	ASGVNQLYDI	60			
DB	1	MAACLLALATLTLFQSL	IGPSSSEPPPSAVTI	IKSWDKMQEDLVTLAKT	ASGVNQLYDI	60			
QY	61	YEKYQDLYTYVEPNNA	RLVEIATAARDIEKLL	SNRSKALVSLALEAEK	VQAAHQWREDFASN	120			
DB	61	YEKYQDLYTYVEPNNA	RLVEIATAARDIEKLL	SNRSKALVSLALEAEK	VQAAHQWREDFASN	120			
QY	121	EVVYINAKDDLDPKND	SEPGSQRIKPVFIEDA	NFGQISYQHAHVHIPT	DIYEGSTIVL	180			
DB	121	EVVYINAKDDLDPKND	SEPGSQRIKPVFIEDA	NFGQISYQHAHVHIPT	DIYEGSTIVL	180			
QY	181	NELNWT	SALDEVFKKNEEDPS	LLQVFGSATGLARYYP	ASPDNSRTPNKIDLYD	240			
DB	181	NELNWT	SALDEVFKKNEEDPS	LLQVFGSATGLARYYP	ASPDNSRTPNKIDLYD	240			
QY	241	RPWTIOGAASP	KMLILVDVSGSVSGLT	KLIRTSVSEMLET	LSDDDFVNVASNSNAQD	300			
DB	241	RPWTIOGAASP	KMLILVDVSGSVSGLT	KLIRTSVSEMLET	LSDDDFVNVASNSNAQD	300			
QY	301	VSCFQHLVQANVRNK	KVLDKAVNNITAGITD	YKKGFSFAEQLLN	VNSRANCKIIML	360			
DB	301	VSCFQHLVQANVRNK	KVLDKAVNNITAGITD	YKKGFSFAEQLLN	VNSRANCKIIML	360			
QY	361	FTDGEERAQEIFNK	YNKDKKRVYFRFESV	GQHNTERGPIQMACEN	KGYEIEIPSIGAIR	420			
DB	361	FTDGEERAQEIFNK	YNKDKKRVYFRFESV	GQHNTERGPIQMACEN	KGYEIEIPSIGAIR	420			
QY	421	INTOEYLDVLGRPMV	LAGRAKQVQWTVNYLD	ALEGLVITGTLPVFN	ITQGFENKTNLK	480			
DB	421	INTOEYLDVLGRPMV	LAGRAKQVQWTVNYLD	ALEGLVITGTLPVFN	ITQGFENKTNLK	480			
QY	481	NQLILGVMGVDVSL	EIKRLTPRETLCPNG	YVFAIDPNGYVLL	HPNLPKPKSQEPVTL	540			
DB	481	NQLILGVMGVDVSL	EIKRLTPRETLCPNG	YVFAIDPNGYVLL	HPNLPKPKSQEPVTL	540			
QY	541	DFLDAELENDIKVE	IRNKMIDGESGKTFT	LVKSQDERYIDKGNRT	YTWTPVNGTDYSL	600			
DB	536	DFLDAELENDIKVE	IRNKMIDGESGKTFT	LVKSQDERYIDKGNRT	YTWTPVNGTDYSL	595			
QY	601	ALVLPYTSFYIIKA	LEETITQARSKGKMKD	SETLKPDPNEESGYT	FIAPRDYCNDLKI	660			
DB	596	ALVLPYTSFYIIKA	LEETITQARSKGKMKD	SETLKPDPNEESGYT	FIAPRDYCNDLKI	655			
QY	661	SDNTEFLANFNEFI	DRKTPNPNPCNADLN	RVLLDAGFTNELVQNT	YWSKOKNKGVKAR	720			
DB	656	SDNTEFLANFNEFI	DRKTPNPNPCNADLN	RVLLDAGFTNELVQNT	YWSKOKNKGVKAR	715			
QY	721	FVVTGGITRVYPKE	AGENMQENPETYEDS	FYKRSNDNDNYFTAP	YFNKSGPGAYESGI	780			
DB	716	FVVTGGITRVYPKE	AGENMQENPETYEDS	FYKRSNDNDNYFTAP	YFNKSGPGAYESGI	775			
QY	781	MVSKAVEIITQGLK	LPVAVGIKIDVNSWIE	NFTKTSIRDP	CAGPVCDCRNSDVMDCVI	840			
DB	776	MVSKAVEIITQGLK	LPVAVGIKIDVNSWIE	NFTKTSIRDP	CAGPVCDCRNSDVMDCVI	835			
QY	841	LDDGGFLMANHDDY	TNQIGRFGEIDP	SLMRHLVNI	SVYAFNKS	SYQSVCEPGAAPKQ	900		
DB	836	LDDGGFLMANHDDY	TNQIGRFGEIDP	SLMRHLVNI	SVYAFNKS	SYQSVCEPGAAPKQ	895		
QY	901	GAGHRSAYVPSVADI	LIQIGWATAA	AAWSILQOFLLS	TFPRLL	EAVEMEDDDFTASLSKQ	960		
DB	896	GAGHRSAYVPSVADI	LIQIGWATAA	AAWSILQOFLLS	TFPRLL	EAVEMEDDDFTASLSKQ	955		
QY	961	SCITEQTYEFFDND	SKFSVGLDGCN	CSRIFHGEK	LNTNLI	FIWVESKGTCTP	1020		
DB	956	SCITEQTYEFFDND	SKFSVGLDGCN	CSRIFHGEK	LNTNLI	FIWVESKGTCTP	1015		
QY	1021	QAEQTS	DGPNC DMVK	1036					
DB	1016	QAEQTS	DGPNC DMVK	1031					

RESULT 9
US-08-455-543A-56
; Sequence 56, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1084 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-455-543A-56

Query Match 99.0%; Score 5386.5; DB 1; Length 1084;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 1028; Conservative 0; Mismatches 1; Indels 7; Gaps 1;
QY 1 MAAGCLLALTTLTFLFOSLLIGPSSEEPFSAVITKSWDKMQEDLVLTAKTASGVNOLVDI 60
DB 1 MAAGCLLALTTLTFLFOSLLIGPSSEEPFSAVITKSWDKMQEDLVLTAKTASGVNOLVDI 60
QY 61 YEKYODLYTVEPNNAQQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHOREDFASN 120
DB 61 YEKYODLYTVEPNNAQQLVEIAARDIEKLLSNRKSALVSLALEAEKVQAAHOREDFASN 120
QY 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFQROISYQHAHVHIPTDIYEGSTIVL 180
DB 121 EYVYNAKDDLDPEKNDSEPGSORIKPVFIEDANFQROISYQHAHVHIPTDIYEGSTIVL 180
QY 181 NELNMTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPWVDSRTPNKIDLDVRR 240
DB 181 NELNMTSALDEVFKKNREEDPSLLMQVFGSATGLARYYPASPWVDSRTPNKIDLDVRR 240
QY 241 RPWYIQGAASPKDMLILVDVSGVSGLTLLKLRISYSEMLETSLDDDFNVASFNSNAOD 300
DB 241 RPWYIQGAASPKDMLILVDVSGVSGLTLLKLRISYSEMLETSLDDDFNVASFNSNAOD 300
QY 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNYSRANCKIIML 360
DB 301 VSCFQHLVQANVRNKKVLDKAVNNITAKGIDYKKGFSFAFQOLLNYSRANCKIIML 360
QY 361 FTDGGEERAQEIFNKYKDKVRFVSGQHYERGPQWACENKGYIYEIPSGAIGR 420
DB 361 FTDGGEERAQEIFNKYKDKVRFVSGQHYERGPQWACENKGYIYEIPSGAIGR 420
QY 421 INTQYLDVLGRPMVLGAKQVQWNTVYLDALGLVITGTLPVFNITGOFENKTNLK 480
DB 421 INTQYLDVLGRPMVLGAKQVQWNTVYLDALGLVITGTLPVFNITGOFENKTNLK 480
QY 481 NQLIILGVMGVDVSLDIKRLTFRFLCPNGYFAIDPNCYVLLHPLNLPKPKSQBPVTL 540
DB 481 NQLIILGVMGVDVSLDIKRLTFRFLCPNGYFAIDPNCYVLLHPLNLPKPKSQBPVTL 540
QY 541 DFLDAELENDAKVEIRNKMIDGESGEKTERTLVKSDERYIDKGNRTYTWTPVNGFDYSL 600
DB 541 DFLDAELENDAKVEIRNKMIDGESGEKTERTLVKSDERYIDKGNRTYTWTPVNGFDYSL 600
QY 601 ALVLPYTFYIIKAKLEETITQARSKKGMKDSITLKPDPNFEEGTYFTIAPRDYCNLDKI 660
DB 601 ALVLPYTFYIIKAKLEETITQARSKKGMKDSITLKPDPNFEEGTYFTIAPRDYCNLDKI 660
QY 661 SDNTEFLLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQNYWSKQNIKGVKAR 720
DB 661 SDNTEFLLNFEFIDRKTTPNPNPCNADLINRVLLDAGFTNELVQNYWSKQNIKGVKAR 720
QY 721 FVVTGGITRVYPKEAGENQWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
DB 721 FVVTGGITRVYPKEAGENQWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGI 780
QY 781 MVSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPCCAGPVCDCCKRNSDVMDCVI 840
DB 781 MVSKAVEIYIOGKLLKPAVVGKIDVNSWIENTFTKTSIRDPCCAGPVCDCCKRNSDVMDCVI 840
QY 841 LDDGGFLLMANHDDYTNOIGRFFGGEIDPSLMRHLNYSVYAFNKSYDYSVCEPQAPKQ 900
DB 841 LDDGGFLLMANHDDYTNOIGRFFGGEIDPSLMRHLNYSVYAFNKSYDYSVCEPQAPKQ 900
QY 901 GAGHRSAYVPSVADILQIGWATAAASWLSLQFLLSLTFPRLEAVEMEDDDFTASLSQ 960
DB 901 GAGHRSAYVPSVADILQIGWATAAASWLSLQFLLSLTFPRLEAVEMEDDDFTASLSQ 960
QY 961 SCITEQTOYFFDNDSKFSFVLDGNCNCRIFHGEKMLNTNLIIFIMVESKGTCPDTRLLI 1020
DB 961 SCITEQTOYFFDNDSKFSFVLDGNCNCRIFHGEKMLNTNLIIFIMVESKGTCPDTRLLI 1020
QY 1021 QAEQTSDFGNPCDMVK 1036

Db 1014 QAEQTSDBPNPCDVK 1029

RESULT 11

US-08-455-543A-53

Sequence 53, Application US/08455543A

Patent No. 5792846

GENERAL INFORMATION:

APPLICANT: Harpold, Michael

APPLICANT: Ellis, Steven

APPLICANT: Williams, Mark

APPLICANT: Feldman, Daniel

APPLICANT: McCue, Ann

APPLICANT: Brenner, Robert

TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

TITLE OF INVENTION: METHODS

NUMBER OF SEQUENCES: 57

CORRESPONDENCE ADDRESS:

ADDRESSEE: Brown, Martin, Haller & McClain

STREET: 1660 Union Street

CITY: San Diego

STATE: California

COUNTRY: USA

ZIP: 92101-2926

COMPUTER READABLE FORM:

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 1.5

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/455,543A

FILING DATE: May 31, 1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/223,305

FILING DATE: April 4, 1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/868,354

FILING DATE: April 10, 1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/745,206

FILING DATE: 15-AUG-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/620,250

FILING DATE: 30-NOV-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/482,384

FILING DATE: 20-FEB-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/603,751

FILING DATE: 04-APR-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: WO PCT/US89/01408

FILING DATE: 04-APR-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/176,899

FILING DATE: 04-APR-1988

ATTORNEY/AGENT INFORMATION:

NAME: Seidman, Stephanie L.

REGISTRATION NUMBER: 33,779

REFERENCE/DOCKET NUMBER: 6362-52517

TELEPHONE: (619)238-0999

TELEFAX: (619)238-0062

INFORMATION FOR SEQ ID NO: 53:

SEQUENCE CHARACTERISTICS:

LENGTH: 1103 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: internal

US-08-455-543A-53

Query Match 98.6%; Score 5367; DB 1; Length 1103;
Best Local Similarity 97.4%; Pred. No. 0;
Matches 1028; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY	1	MAAGCLLALTTLTFLQSLIGPSSEEPFSAVTIKSNWVKMOEDLVLTAKTASGVNQLVDI	60
DB	1	MAAGCLLALTTLTFLQSLIGPSSEEPFSAVTIKSNWVKMOEDLVLTAKTASGVNQLVDI	60
QY	61	YEKYQDLYTVEPNARQLVEIAARDIEKLNSRSLKALVSLALEAEKVQAAHOREFASN	120
DB	61	YEKYQDLYTVEPNARQLVEIAARDIEKLNSRSLKALVSLALEAEKVQAAHOREFASN	120
QY	121	EVYYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGQISYQHAHVHPTDIYEGSTIVL	180
DB	121	EVYYNAKDDLDPEKNDSEPGSORIKPVFIEDANFGQISYQHAHVHPTDIYEGSTIVL	180
QY	181	NELNWTSSALDEVFKKREEDPSLLWQVFGSATGLARYYPASPMVDNSRTPNKIDLDVRR	240
DB	181	NELNWTSSALDEVFKKREEDPSLLWQVFGSATGLARYYPASPMVDNSRTPNKIDLDVRR	240
QY	241	RPWYIQGAASPKDMLILVDVSGVSGITLKLIRTSVSEMLETSLDSDDDFVNVSFNSNAQD	300
DB	241	RPWYIQGAASPKDMLILVDVSGVSGITLKLIRTSVSEMLETSLDSDDDFVNVSFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVLDKAVNNITAKGITYKKGFSAFEOLLNYSRANCNKIIML	360
DB	301	VSCFQHLVQANVRNKKVLDKAVNNITAKGITYKKGFSAFEOLLNYSRANCNKIIML	360
QY	361	FTDGGEEAQAELFNKYNKDKKVRVFRFSYGOHNYERGPLOMACENKGYVYEIPSGAIR	420
DB	361	FTDGGEEAQAELFNKYNKDKKVRVFRFSYGOHNYERGPLOMACENKGYVYEIPSGAIR	420
QY	421	INTQEYLDVLRPMVLGDKAKQVQNTVYLDALGLVITGTLPVFNITQGFENKTNLX	480
DB	421	INTQEYLDVLRPMVLGDKAKQVQNTVYLDALGLVITGTLPVFNITQGFENKTNLX	480
QY	481	NOLILGVMGVDSLEDIKRLTLPRTLCPNGYYFAIDPNGVYLLHPNLQPK-----	530
DB	481	NOLILGVMGVDSLEDIKRLTLPRTLCPNGYYFAIDPNGVYLLHPNLQPKIGVGIPTIN	540
QY	531	-----NPKSQEPVTLDFDAELENDIKVEIRKMKIDGEGEKTFTFLVKSQERYI	581
DB	541	LRKRRNIQNPKSQEPVTLDFDAELENDIKVEIRKMKIDGEGEKTFTFLVKSQERYI	600
QY	582	DGKGRITYTTPVNGTDYSLALVLPYTFYVYIKAKLEETITQARSKKGKMKDSETLKPDNF	641
DB	601	DGKGRITYTTPVNGTDYSLALVLPYTFYVYIKAKLEETITQARSKKGKMKDSETLKPDNF	653
QY	642	ESGYTFIAPRDYCNLDKI SDNNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTN	701
DB	654	ESGYTFIAPRDYCNLDKI SDNNTEFLNNEFIDRKTNNPNSCNADLINRVLLDAGFTN	713
QY	702	ELVQNTWSKQNKIKGVKARFVTDGGITRVYPKEAGENQENPETYEDSFYKRSNDNY	761
DB	714	ELVQNTWSKQNKIKGVKARFVTDGGITRVYPKEAGENQENPETYEDSFYKRSNDNY	773
QY	762	VETAPYFNKSGPGAYESGIMVSKAVEIYLOGKLLKPAVVICIKIDVNSWIENFTKSTRDP	821
DB	774	VETAPYFNKSGPGAYESGIMVSKAVEIYLOGKLLKPAVVICIKIDVNSWIENFTKSTRDP	833
QY	822	CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTQIGRFFGEIDPSLMRHLVNSVYA	881
DB	834	CAGPVCDCRNSDVMDCVILDDGGFLLMANHDDYTQIGRFFGEIDPSLMRHLVNSVYA	893
QY	882	FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAASIIQQFLSLTFFPR	941
DB	894	FNKSYDYQSVCEPGAAPKOGAGHRSAYVPSVADILQIGWATAAASIIQQFLSLTFFPR	953
QY	942	LLEAVEMEDDDFTASLSKQSCITEQTYQFFDNDKSFSGVLDGCGNSRIFPHGKMLNTNL	1001
DB	954	LLEAVEMEDDDFTASLSKQSCITEQTYQFFDNDKSFSGVLDGCGNSRIFPHGKMLNTNL	1013

QY 1002 IFIMVSKGTCTPCDTRLLIQAEQTSQSDGNPCDMVK 1036
Db 1014 IFIMVSKGTCTPCDTRLLIQAEQTSQSDGNPCDMVK 1048

RESULT 12
US-08-223-305C-53
; Sequence 53, Application US/08223305C
; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 53:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1103 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-223-305C-53

Query Match 98.6%; Score 5367; DB 2; Length 1103;
Best Local Similarity 97.4%; Pred. No. 0;
Matches 1028; Conservative 0; Mismatches 1; Indels 26; Gaps 2;

QY 1 MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWVDKMQEDLVTLAKTAGVGNQLVDI 60
Db 1 MAAGCLLALTLTLFQSLIGPSSEPPPSAVTIKSWVDKMQEDLVTLAKTAGVGNQLVDI 60
QY 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALYSALAEAEKVQAAHQRREDFASN 120
Db 61 YEKYQDLYTVEPNARQLVEIAARDIEKLLSNRSKALYSALAEAEKVQAAHQRREDFASN 120
QY 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
Db 121 EVVYNAKDDLDPEKNDSEPGSQRIKPVFIEDANFGROISYOHAAVHIPTDIYEGSTIVL 180
QY 181 NELNWTSALEVEFKKNREEDPSLLMQVFGSATGLARYYPASPVVDNSRTPNKIDLYDVR 240
Db 181 NELNWTSALEVEFKKNREEDPSLLMQVFGSATGLARYYPASPVVDNSRTPNKIDLYDVR 240
QY 241 RPWTIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSEMLETSLDDDFVNVASFNSNAQD 300
Db 241 RPWTIQGAASPKDMLILVDVSGVSGLTGLKIRTSVSEMLETSLDDDFVNVASFNSNAQD 300
QY 301 VSCFQHLVQAVNRNKKVYLKDAVNITAKGITYDYKKGFSFAFEQLLNNVSRANCKIIML 360
Db 301 VSCFQHLVQAVNRNKKVYLKDAVNITAKGITYDYKKGFSFAFEQLLNNVSRANCKIIML 360
QY 361 FTDGEERAQEIFNKYNKDKKVRFRFESVGOHNYERGIOMACENKGYEIPSGAIR 420
Db 361 FTDGEERAQEIFNKYNKDKKVRFRFESVGOHNYERGIOMACENKGYEIPSGAIR 420
QY 421 INTOEYLDVLGRPMVLADKAKQVNTNVDLDALEGLVITGTLVPVNTIGOFENKTNLK 480
Db 421 INTOEYLDVLGRPMVLADKAKQVNTNVDLDALEGLVITGTLVPVNTIGOFENKTNLK 480
QY 481 NQLILGVNGVDVSLEDIKRLTPRTFLCPNGYYFAIDPNGYVLLHPNLQPK 530
Db 481 NQLILGVNGVDVSLEDIKRLTPRTFLCPNGYYFAIDPNGYVLLHPNLQPK 540
QY 531 -----NPKSQEPVTLDFDAELENDIKVEIRNKKMIDGESGKFTLVKSDERYI 581
Db 541 LKRRPNIQNPKSQEPVTLDFDAELENDIKVEIRNKKMIDGESGKFTLVKSDERYI 600
QY 582 DKGRTYTTWTPVNGTDYSLALVLTPTSYIIKAKLEETITQARSKKGMKSDSETLKPNF 641
Db 601 DKGRTYTTWTPVNGTDYSLALVLTPTSYIIKAKLEETITQARSKKGMKSDSETLKPNF 653
QY 642 EESGYTFIAPRDYCNLDKISDNNTFEFLNFEFIDRKTPNPNPCNADLINRVLLDAGFTN 701
Db 654 EESGYTFIAPRDYCNLDKISDNNTFEFLNFEFIDRKTPNPNPCNADLINRVLLDAGFTN 713
QY 702 ELVQYNSKQKNIGVKARFVVTDGGITRVYPKEAGENQWNPETEDSFYKRSLDNDNY 761
Db 714 ELVQYNSKQKNIGVKARFVVTDGGITRVYPKEAGENQWNPETEDSFYKRSLDNDNY 773
QY 762 VFTAPYFNKSGPGAYESGIMVSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDP 821
Db 774 VFTAPYFNKSGPGAYESGIMVSKAVEIYIOGKLLKPAVVGKIDVNSWIENFTKTSIRDP 833
QY 822 CAGPVCCCKRNSDVMDCVILDDGGFLLMANHDDYTNQIGRFFGEIDPSLMRHLVNIYVA 881
Db 834 CAGPVCCCKRNSDVMDCVILDDGGFLLMANHDDYTNQIGRFFGEIDPSLMRHLVNIYVA 893
QY 882 FNKSYDYQSVCEPGAAPKQAGHRSAYVPSVADILQIGWATAAAWSILOQFLLSLTFR 941
Db 894 FNKSYDYQSVCEPGAAPKQAGHRSAYVPSVADILQIGWATAAAWSILOQFLLSLTFR 953
QY 942 LLEAVEMEDDDFTASLSKQSCITEQTQYFFDNDSKSFSGVLDGCGNCSRIFHGEKLMNTNL 1001
Db 954 LLEAVEMEDDDFTASLSKQSCITEQTQYFFDNDSKSFSGVLDGCGNCSRIFHGEKLMNTNL 1013
QY 1002 IFIMVSKGTCTPCDTRLLIQAEQTSQSDGNPCDMVK 1036

Db 1014 IFIMVSKGTCPCDTRLIIQAEQTSDBGPNPCDMVK 1048
|||||

RESULT 13

US-08-455-543A-55

: Sequence 55, Application US/08455543A

: Patent No. 5792846

: GENERAL INFORMATION:

: APPLICANT: Harpold, Michael

: APPLICANT: Ellis, Steven

: APPLICANT: Williams, Mark

: APPLICANT: Feldman, Daniel

: APPLICANT: McCue, Ann

: APPLICANT: Brenner, Robert

: TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

: METHOD OF INVENTION: METHODS

: NUMBER OF SEQUENCES: 57

: CORRESPONDENCE ADDRESS:

: ADDRESSEE: Brown, Martin, Haller & McClain

: STREET: 1660 Union Street

: CITY: San Diego

: STATE: California

: COUNTRY: USA

: ZIP: 92101-2926

: COMPUTER READABLE FORM:

: MEDIUM TYPE: Diskette

: COMPUTER: IBM Compatible

: OPERATING SYSTEM: DOS

: SOFTWARE: FastSeq Version 1.5

: CURRENT APPLICATION DATA:

: APPLICATION NUMBER: US/08/455,543A

: FILING DATE: May 31, 1995

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: 08/223,305

: FILING DATE: April 4, 1994

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: 07/868,354

: FILING DATE: April 10, 1992

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: US 07/745,206

: FILING DATE: 15-AUG-1991

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: US 07/620,250

: FILING DATE: 30-NOV-1990

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: US 07/482,384

: FILING DATE: 20-FEB-1990

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: US 07/603,751

: FILING DATE: 04-APR-1989

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: WO PCT/US89/01408

: FILING DATE: 04-APR-1989

: PRIOR APPLICATION DATA:

: APPLICATION NUMBER: US 07/176,899

: FILING DATE: 04-APR-1988

: ATTORNEY/AGENT INFORMATION:

: NAME: Seidman, Stephanie L.

: REGISTRATION NUMBER: 33,779

: REFERENCE/DOCKET NUMBER: 6362-52517

: TELECOMMUNICATION INFORMATION:

: TELEPHONE: (619)238-0999

: TELEFAX: (619)238-0062

: INFORMATION FOR SEQ ID NO: 55:

: SEQUENCE CHARACTERISTICS:

: LENGTH: 1079 amino acids

: TYPE: amino acid

: STRANDEDNESS: single

: TOPOLOGY: linear

: MOLECULE TYPE: protein

: FRAGMENT TYPE: internal

: US-08-455-543A-55

Query Match 98.2%; Score 5347; DB 1; Length 1079;

Best Local Similarity 98.7%; Pred. No. 0;

Matches 1023; Conservative 0; Mismatches 1; Indels 12; Gaps 2;

QY	1	MAAGCLLALTLTLFQSLILIGPSSSEEPFPPSAVTIKSWDKMQEDLVTLAKTASGVNQVLVDI	60
DB	1	MAAGCLLALTLTLFQSLILIGPSSSEEPFPPSAVTIKSWDKMQEDLVTLAKTASGVNQVLVDI	60
QY	61	YKYQDLTYTVEPNNAQQLVEIARDTEKLSNRSKALVSLALEAEKVQAAHQHREDFASN	120
DB	61	YKYQDLTYTVEPNNAQQLVEIARDTEKLSNRSKALVSLALEAEKVQAAHQHREDFASN	120
QY	121	EVYYNAKDDLDPEKNDSEPGSQRIKPVFTEDANFGQISQYHAAVHIPTDIYEGSTIVL	180
DB	121	EVYYNAKDDLDPEKNDSEPGSQRIKPVFTEDANFGQISQYHAAVHIPTDIYEGSTIVL	180
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DB	241	RPWYIOGAASPDKMLILVDVSGVSGLTLLKIRTSVSEMLETSLDDDFVNVASFNSNAQD	300
QY	301	VSCFQHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFEQLLNYSRANCNKIIML	360
DB	301	VSCFQHLVQANVRNKKVLDVANNITAKGIDYKKGFSFAFEQLLNYSRANCNKIIML	360
QY	361	FTDGGERAQEIENKYNKDKKVRFRFSVGQHNHYERGPIOMMACENKGYIYEIPSGAIR	420
DB	361	FTDGGERAQEIENKYNKDKKVRFRFSVGQHNHYERGPIOMMACENKGYIYEIPSGAIR	420
QY	421	INTQEYLDVLGRPMVLGDKAKOVNTNVDLDALEGLVLTGLPVENITGQENKTNLK	480
DB	421	INTQEYLDVLGRPMVLGDKAKOVNTNVDLDALEGLVLTGLPVENITGQENKTNLK	480
QY	481	NQLILGVMGVDSLEDIKRLTPRTLCPCNGYFPAIDPNGYVLLHPNLQPNKPSQEPVTL	540
DB	481	NQLILGVMGVDSLEDIKRLTPRTLCPCNGYFPAIDPNGYVLLHPNLQPNKPSQEPVTL	540
QY	541	DFLDALENDIKVEIRNKMIDGESGKFTFTLVKSQDERYIDKGNRTYTTPVNGTDYSL	600
DB	536	DFLDALENDIKVEIRNKMIDGESGKFTFTLVKSQDERYIDKGNRTYTTPVNGTDYSL	595
QY	601	ALVLPYTSFYIKAKLEETITQARSKKGMKDSKSETLKPDNFESGYTFIAPRDCNDLKI	660
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QY	661	SDNTEFLNNEFIDRKTPNPNPSCNADLINRVLLDAGFTNELVQNTWSKQNKIKGYKAR	720
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QY	721	FVYTDGGITRVYKPEAGENQENPETEYDSFYKRSLDNDNYVFTAPYFNKSGGAYESGI	780
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QY	781	MYSKAVEIYIQGLLPAVVGKIDVNSWIENTFTKTSIRDPACGVPVCDCKRNSDVMDCVI	840
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RESULT 15

US-08-435-675B-5
; Sequence 5, Application US/08435675B
; Patent No. 5710250

GENERAL INFORMATION:

; APPLICANT: Ellis, Steven Bradley
; APPLICANT: Williams, Mark E.
; APPLICANT: Harpold, Michael Miller
; APPLICANT: Schwartz, Robert
; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: CALCIUM CHANNEL COMPOSITIONS AND METHODS

; NUMBER OF SEQUENCES: 6

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

; CITY: San Diego

; STATE: CA

; COUNTRY: USA

; ZIP: 92101-2926

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSeq Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/435,675B

; FILING DATE: 05-MAY-1995

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/314,083

; FILING DATE: 28-SEP-1994

; APPLICATION NUMBER: US 07/914,231

; FILING DATE: 13-JUL-1992

; APPLICATION NUMBER: US 07/603,751

; FILING DATE: 08-NOV-1990

; ATTORNEY/AGENT INFORMATION:

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; REGISTRATION NUMBER: 33,779

; REFERENCE/DOCKET NUMBER: 6362-53193

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 619-238-0999

; TELEFAX: 619-238-0062

; TELEX:

; INFORMATION FOR SEQ ID NO: 5:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1106 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FRAGMENT TYPE: internal

US-08-435-675B-5

Query Match 96.1%; Score 5229.5; DB 1; Length 1106;
Best Local Similarity 94.8%; Pred. No. 0;
Matches 1003; Conservative 14; Mismatches 12; Indels 29; Gaps 4;

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Search completed: June 8, 2001, 19:38:04

Job time: 31330 sec

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; Sequence 24: Application US/07745206A
; Patent No. (543992)
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;;
; ADDRESS: Fitch, Even, Tabin & Flannery
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; STREET: 135 S. Lasalle
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; CITY: Chicago
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; STATE: Illinois
;
; COUNTRY: U.S.A.
;
; ZIP: 60603
; COMPUTER READABLE FORM:
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SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/745.206A
FILING DATE: 19910815
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Feder, Scott B
REFERENCE/DOCKET NUMBER: 51504
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-372-7842
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 3566 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..3273
US-07-745-206A-24

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  Ratio: 5.254         Gaps: 0
  Percent Simlarity: 100.000    Percent Identity: 100.000

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Align seg 1/1 to: US-07-745-206A-24 from: 1 to: 3566

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alignment_block:
US-09-397-548-16 x US-07-745-206A-24 ..
Align seq 1/1 to: US-07-745-206A-24 from: 1 to: 3566

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seq_name: /sgn2_6/ptodata/2/ina/5B_COMB.seq:US-08-311-363-24
seq_documentation_block:
; Sequence 24, Application US/08311363
; Patent No. 5876958
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: Human Calcium Channel Compositions and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,363
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-51506
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3566 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS

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; Sequence 11, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS

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; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-52517
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3600 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
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; US-08-455-543A-11

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; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
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; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
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; APPLICATION NUMBER: US 07/482,384
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; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989

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; Patent No. 5846757
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BROWN, MARTIN, HALLER & MCCLAIN
; STREET: 1660 UNION STREET
; CITY: SAN DIEGO
; STATE: CA
; COUNTRY: USA
; ZIP: 92101
; COMPUTER READABLE FORM:
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; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/08193,078B
; APPLICATION NUMBER: US/08193,078B
; FILING DATE: 07-FEB-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/868,354
; FILING DATE: 10-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Seigman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-53607
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-238-0999
; TELEFAX: 619-238-0062
; INFORMATION FOR SEQ ID NO: 11:
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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
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; COMPUTER: IBM Compatible
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; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
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; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 52516 (P519739)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 33:
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; LENGTH: 3600 base pairs

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; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
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; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
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; FILING DATE: 11-AUG-1993
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; APPLICATION NUMBER: WO PCT/US92/06903
; FILING DATE: 14-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/914,231
; FILING DATE: 13-JUL-1992
; PRIOR APPLICATION DATA:
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; FILING DATE: 10-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
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; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
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; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-55038
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 238-0999
; TELEFAX: (619) 238-0062
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; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
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/ APPLICATION NUMBER: 08/105,536
/ FILING DATE: 11-AUG-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Seidman, Stephanie L.
/ REGISTRATION NUMBER: 33,779
/ REFERENCE/DOCKET NUMBER: 519808
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (619) 238-0999
/ TELEFAX: (619) 238-0062
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; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: McCue, Ann
; APPLICANT: Gillespie, Allison
; APPLICANT: Feldman, Daniel
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: US
; ZIP: 92101
; COMPUTER READABLE FORM:
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; FILING DATE:
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; PRIOR APPLICATION NUMBER: 08/404,950
; FILING DATE: 13-MAR-1995
; APPLICATION NUMBER: 08/336,257
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; PRIOR APPLICATION DATA:
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; ATTORNEY/AGENT INFORMATION:
; NAME: Seidman, Stephanie L.
; REGISTRATION NUMBER: 33,779
; REFERENCE/DOCKET NUMBER: 6362-519812
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 238-0999
; TELEFAX: (619) 238-0062
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; Patent No. 6040436
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:
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; LENGTH: 3298 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 20..3292
; US-08-713-118-3

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; Patent No. 6140485
; GENERAL INFORMATION:
; APPLICANT: Franco, Rodrigo
; APPLICANT: Sun Chen, Ai Ru
; APPLICANT: Suey, David J.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING HUMAN NEURONAL
; TITLE OF INVENTION: CALCIUM CHANNEL SUBUNITS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173-4799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/452,007
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/713,118
; FILING DATE: 16-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Mata, Elizabeth W.
; REGISTRATION NUMBER: 38,236
; REFERENCE/DOCKET NUMBER: ACC96-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 3298 base pairs
 ; TYPE: nucleic acid
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 ; TOPOLOGY: linear
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; Patent No. 5792846

; GENERAL INFORMATION:

; APPLICANT: Harpold, Michael

; APPLICANT: Ellis, Steven

; APPLICANT: Williams, Mark

; APPLICANT: Feldman, Daniel

; APPLICANT: McCue, Ann

; APPLICANT: Brenner, Robert

; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND

; TITLE OF INVENTION: METHODS

; NUMBER OF SEQUENCES: 57

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Brown, Martin, Haller & McClain

; STREET: 1660 Union Street

CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455.543A
FILING DATE: May 31, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/223.305
FILING DATE: April 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868.354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745.206
FILING DATE: 15-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620.250
FILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482.384
FILING DATE: 20-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/603.751
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176.899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 20:
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TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
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; Patent No. 5851824
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; STREET: 1660 Union Street
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/223,305C
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
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; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
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; FILING DATE: 20-FEB-1990
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; APPLICATION NUMBER: US 07/603,751
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; APPLICATION NUMBER: WO PCT/US89/01408
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/176,899
; FILING DATE: 04-APR-1988
; ATTORNEY/AGENT INFORMATION:
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; REFERENCE/DOCKET NUMBER: 52516 (P519739)
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; TELEPHONE: (619)238-0999
; TELEFAX: (619)238-0062
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3657 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: Genomic DNA
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seq_documentation_block:
; Sequence 34, Application US/08455543A
; Patent No. 5792846
; GENERAL INFORMATION:
; APPLICANT: Harpold, Michael
; APPLICANT: Ellis, Steven
; APPLICANT: Williams, Mark
; APPLICANT: Feldman, Daniel
; APPLICANT: McCue, Ann
; APPLICANT: Brenner, Robert
; TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
; TITLE OF INVENTION: METHODS
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brown, Martin, Haller & McClain
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-2926
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/455,543A
; FILING DATE: May 31, 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/223,305
; FILING DATE: April 4, 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/868,354
; FILING DATE: April 10, 1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/745,206
; FILING DATE: 15-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/620,250
; FILING DATE: 30-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/482,384
; FILING DATE: 20-FEB-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/603,751
; FILING DATE: 04-APR-1989
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: WO PCT/US89/01408
FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/176,899
FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-52517
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)238-0999
TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO: 34:
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LENGTH: 3585 base pairs
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US-08-455-543A-34

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